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<110> diaDexus, Inc.
Macina, Roberto
Turner, Leah
Sun, Yongming

<120> Compositions, Splice Variants and Methods Relating to Colon Specific Genes and Proteins

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<151> 2002-12-04

<150> US 60/431,144
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<211> 673
<212> DNA
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	ccgcaagaac	cccgccccca	cctgccgtga	cctcaagatg	tgccactctg	actggatgag	300
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12

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<212> DNA
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<223> n=a, c, g or t

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<212> DNA
<213> Homo sapien

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15

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<211> 1106
<212> DNA
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16

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<212> DNA
<213> Homo sapien

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17

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<212> DNA
<213> Homo sapien

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19

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 <212> DNA
 <213> Homo sapien

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31

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<212> DNA
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32

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<211> 859
<212> DNA
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<211> 2236
<212> DNA
<213> Homo sapien

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34

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35

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<211> 6003

<212> DNA

<213> Homo sapien

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<213> Homo sapien

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	c	ttt	act	ttgg	act	ccct	cttgc	660	
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 <212> DNA
 <213> Homo sapien

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54

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<212> DNA
<213> Homo sapien

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55

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<212> DNA

<213> Homo sapien

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56

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57

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73

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<212> DNA
<213> Homo sapien
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98

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<213> Homo sapien

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<212> DNA
<213> Homo sapien

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<211> 1168
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103

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<211> 1352
<212> DNA
<213> Homo sapien

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104

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<210> 73
<211> 1445
<212> DNA
<213> Homo sapien

<400> 73
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105

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<210> 74
<211> 2290
<212> DNA
<213> Homo sapien

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106

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<211> 1033
<212> DNA
<213> Homo sapien

<400> 75						
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107

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<211> 1190

<212> DNA

<213> Homo sapien

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<223> n=a, c, g or t

<220>

<221> misc_feature

<222> (1122)..(1122)

<223> n=a, c, g or t

<400> 76

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108

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<210> 77
<211> 871
<212> DNA
<213> Homo sapien

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<210> 78
<211> 1283
<212> DNA
<213> Homo sapien

109

<400> 78
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 <213> Homo sapien

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110

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<212> DNA
<213> Homo sapien

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<210> 81
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111

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<210> 82
<211> 1911
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<213> Homo sapien

<400> 82
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<211> 1852
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<213> Homo sapien

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<211> 1798
<212> DNA
<213> Homo sapien

<400> 84
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<212> DNA
<213> Homo sapien

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117

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<211> 1547
<212> DNA
<213> Homo sapien

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118

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<212> DNA
<213> Homo sapien

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<212> DNA
<213> Homo sapien

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aagaaaggca agaaggctgc tgcaaccta gcaaagaagg tggcggttc cccaaacaaaa	360
aagggttgcag ttgccacacc agccaagaaa gcagctgtca ctccaggcaa aaaggcagca	420
gcaacacctg ccaagaagac agttacacca gccaaagcag ttaccacacc tggcaagaag	480

120

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<210> 89
 <211> 2068
 <212> DNA
 <213> Homo sapien

<400> 89
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 ggctcctcat ctcactcggtt cttatgccaa agatgtaaaa ttgggtgcag atgcccggc 300
 cttaatgctt caagggtgtac acccttttagc cgatgctgtg gccgttacaa tggggccaaa 360

121

gggaagaaca	gtgattattg	agcagagttg	gggaagtccc	aaagtaacaa	aagatggtgt	420
gactgttgc	aagtcaattt	actaaaaga	taaatacaag	aacattggag	ctaaacttgt	480
tcaagatgtt	gccaataaca	caaataaga	agctggggat	ggcactacca	ctgctactgt	540
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cagtagcaac	agcaataagct	cttgc	tcaacaattc	tcatgtacat	ttccagcacc	1920
tagatatttta	atactccact	aaaaggaagc	aggatccctt	gagtagcagt	tgagtccatg	1980
cctggaggca	ggaaaaaaatc	aggatggatc	tggAACACCC	tgttcctg	tggcagtaag	2040
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<210> 90

<211> 366

122

<212> DNA

<213> Homo sapien

<400> 90

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ctttgatgct gagcgggatg ctttgaacat tgaaacagcc atcaagacca aagagggttg	180
gatgaggtca ccattgtcaa catttgacc aaccgcagca atgcacagag acaggatatt	240
gccttcgcct accagagaag gaccaaaaag gaacttgcatt cagcactgaa gtcagccta	300
tctggccacc tggagacggt gattttggc ctattgaaga cacctgctca gtatgacgct	360
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<210> 91

<211> 1346

<212> DNA

<213> Homo sapien

<400> 91

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gcttggaggg tgatcactct acaccccaa gtgcataatgg gtctgtcaaa gcctataacta	180
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atgaggtcac cattgtcaac attttgacca accgcagcaa tgcacagaga caggatattg	300
ccttcgccta ccagagaagg accaaaaagg aacttgcattc agcactgaag tcagccttat	360
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gaatcatggt ctccccgact gaagtggaca tggaaaat taggtctgaa ttcaagagaa	960
agtacggcaa gtccctgtac tattatatcc agcaagacac taagggcgac taccagaaa	1020
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123

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cgtggccatc	cctgtgaggg	tgacgttagc	attaccccca	acctcatttt	agttgcctaa	1200
gcattgcctg	gccttcctgt	ctagtctctc	ctgtaagcca	aagaaatgaa	cattccaagg	1260
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gatgaataaa	ctgaatttgt	acttta				1346

<210> 92
<211> 756
<212> DNA
<213> Homo sapien

<400> 92	ccgaggcccc	tccttgctcg	acgcccata	ctctgccggg	tgactagctg	cttcctttct	60
	ctctcgcgcg	cggtgtggtg	gcagcaggcg	cagcaggcgc	acccagcctc	gaaatgcaga	120
	acgacgcccgg	cgagttcgtg	gacctgtacg	tgccgcggaa	atgctccgct	agcaatcgca	180
	tcatcggtgc	caaggaccac	gcatccatcc	agatgaacgt	ggccgagggtt	gacaagggtca	240
	caggcagggtt	taatggccag	tttaaaactt	atgctatctg	cggggccatt	cgtaggatgg	300
	gtgagtcaga	tgattccatt	ctccgattgg	ccaaggccga	tggcatcg	tcaaagtaag	360
	gttggggct	cacattggg	cagagtgagt	ggactaggac	tgctccagag	gcgtggctt	420
	aacgttgtcc	ttttccctg	gttctaggaa	cttttactg	gagagaatca	cagatgtgga	480
	atatttgtca	taaataaata	atgaaaacct	aaaaaaaaaa	aaaaaaaaac	tcgagactag	540
	cttctctcaa	ataataacca	tacacaacac	taagggcga	acctgatctc	ttatacaagt	600
	atccttagtc	atttctttg	tgcgacaaat	taacctcctc	ggactccggc	tcactcattt	660
	acaccaacca	cccaatatct	ttaaacctag	catggcatac	ctcttatgag	gggggcggga	720
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<210> 93
<211> 1420
<212> DNA
<213> Homo sapien

<400> 93	ccgaggcccc	tccttgctcg	acgcccata	ctctgccggg	tgactagctg	cttcctttct	60
	ctctcgcgcg	cggtgtggtg	gcagcaggcg	cagcaggcgc	acccagcctc	gaaatgcaga	120
	acgacgcccgg	cgagttcgtg	gacctgtacg	tgccgcggaa	atgctccgct	agcaatcgca	180
	tcatcggtgc	caaggaccac	gcatccatcc	agatgaacgt	ggccgagggtt	gacaagggtca	240
	caggcagggtt	taatggccag	tttaaaactt	atgctatctg	cggggccatt	cgtaggatgg	300
	ttagtgtttc	cctgggcttt	gctcatcact	tcgggacatc	gtggacttta	ccgtgcgcac	360

124

tggagtgtgt gatggtgccct gagtagatct gctggcagag tagtttgcgc cagctggact	420
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cagcagactc tgcctctcac taggaggtgc ccccccgacc ccgcgtccacc atagtcaggc	540
tgcaggctgc cccgggagag gtggctcccc ttctgcgcct gtctccattc gtcagcggg	600
ggagagacgt gggctggtgg cacagctgac cttctgccat ctcagggcagc cgagtgaa	660
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gagttgacta ggactgctcc agagggcgtgg tcttaacgtt gtcctttcc cctggttcta	840
ggaacttttgc actggagaga atcacagatg tggaatattt gtcataaata aataatgaaa	900.
acctaaaaaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa	960
aaaaaaaaaaa aaaagaggggg ggggcgcgc caaaaaatcc cccccgggggg cgcccttttg	1020
cgcccccgct tttgtgtgaa aggggggccc ccatgaggggg ctttttaaag ggccgcgcag	1080
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ggggggaaac accctacacc taaacgaaga tatattaaga aactcttggg aggggaagta	1260
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gtatggatgt ggggtggtaa aagaatattt tgggtcttagc gagtgtatgt aatttcgacg	1380
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<210> 94
<211> 1536
<212> DNA
<213> Homo sapien

<400> 94 ggcacgaggc atcgcgcgcg gtgtggtggc agcaggcgca gcaggcgcac ccagcctcga	60
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caatcgcatc atcggtgcca aggaccacgc atccatccag atgaacgtgg ccgaggtgag	180
ctgggagccc gggaggcggg aaggttgtga tatatgtgcg gaaaggcag gctgtcccat	240
tgtggaggag cccctgggtt gaaggtacag gcagaggctg gctttgagga ttggtgttcc	300
ccaaacctgg gggagtggtt tgtgaccctt cttcttttc taggttgaca aggtcacagg	360
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tgtttccctg ggcttgctc atcaacttcgg gacatcggtgg actttaccgt gcgcattgga	480
tggtgtgatg gtgcctgagt agatctgctg gcagagtagt ttgagccagc tggactggc	540

125

tggccgcctg	ccgcttcttg	agggtggaag	aggggtgctc	tgagaagaca	ctcaggcagc	600
agactctgcc	tctcactagg	aggtgcccc	ccgacccccc	tccaccatag	tcaggctgca	660
ggctgcccc	ggagaggtgg	ctcccctct	gcgcctgtct	ccattcgctc	agcgggggag	720
agacgtggc	tggtggcaca	gctgaccttc	tgccatctca	ggcagccgga	gtggaaatat	780
tcttagtgtg	ctttttttt	tttcttaagg	gtgagtcaga	tgattccatt	ctccgattgg	840
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cttttgactg	gagagaatca	cagatgtgga	atatttgtca	taaataaata	atgaaaacct	1020
aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1080
aaaaaaaaaa	gagggggggg	cgcgcwww	aaatcccccc	ggggggcgcg	ccttgcgcc	1140
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<210> 95
 <211> 930
 <212> DNA
 <213> Homo sapien

<400> 95	agatcatgcc	gagcgccgccc	agtgtgatgg	atgcgtggtc	gcggccgagg	tacgtccgc	60
	ggaaatgctc	cgctagcaat	cgcatcatcg	gtgccaagga	ccacgcattcc	atccagatga	120
	acgtggccga	ggttgacaag	gtcacaggca	ggttaatgg	ccagttaaa	acttatgcta	180
	tctgcggggc	cattcgtagg	atgggtgagt	cagatgattc	cattctccga	ttggccaagg	240
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	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	480
	aaaagagggg	ggggcgcc	caaaaaatcc	ccccgggggg	cgcgccttt	cgcgcgcgt	540
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126

gttataaaaa gcaccagcag cgagtggggg aacacagccg agccacgcgg gggagatctc 660
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accctacacc taaacgaaga tatattaaga aactcttggg agggaaagta atatataaac 780
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atagcgaggg gcgtttaga tgataaggta 930

<210> 96
<211> 185
<212> PRT
<213> Homo sapien

<220>
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<222> (35)..(35)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (70)..(70)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (81)..(81)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
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<223> X=any amino acid

<400> 96

Gln Lys Ser Ile His Ala Cys Asn Val Gly Gly Arg Leu Leu Cys Gln
1 5 10 15

Asp Arg Pro Pro Thr Leu Gln Lys Ser Ile His Ala Cys Ala Ala Arg
20 25 30

Ile Ala Xaa Ser Ser Gly His Arg Pro Gly Thr Phe Ser Arg Val Thr
35 40 45

Ala Leu Asn Asp Val Glu Thr Arg Asp Ser Thr Trp Pro His Ala Arg
50 55 60

127

Cys Glu Gly Pro Ala Xaa Ser Arg Asp Val Trp Thr Pro Ala Gly Cys
65 70 75 80

Xaa Gln Glu Ala Val Glu Leu Val Gln Tyr Ala Tyr Xaa Ser Glu Lys
85 90 95

Val Arg Gly Glu Arg Arg Arg Thr Arg Lys Glu Ala Asn Val Lys Asp
100 105 110

Glu Val Lys Asp Arg Gln Ile Asp Arg Gly Glu Thr Ala Lys Arg Thr
115 120 125

Leu Glu Gln Lys Arg Lys Arg Arg Lys Thr Arg Gln Pro Asp Ala Lys
130 135 140

Asp Gly Asp Ser Tyr Asp Pro Tyr Asp Phe Ser Asp Thr Glu Glu Glu
145 150 155 160

Met Pro Gln Val His Thr Pro Lys Thr Ala Asp Ser Gln Glu Thr Lys
165 170 175

Glu Ser Gln Lys Val Glu Leu Ser Glu
180 185

<210> 97
<211> 109
<212> PRT
<213> Homo sapien

<220>
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<222> (11)..(11)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (39)..(39)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (41)..(42)
<223> X=any amino acid

<220>
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<222> (44)..(44)
<223> X=any amino acid

128

<220>
<221> MISC_FEATURE
<222> (55)..(57)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (77)..(77)
<223> X=any amino acid

<400> 97

Ala Glu Thr Cys Gly Pro Leu Gln Asp Ala Xaa Arg Lys Leu Trp Ser
1 5 10 15

Trp Ser Ser Met Leu Thr Phe Arg Glu Gly Ser Trp Arg Thr Glu Lys
20 25 30

Lys Arg Lys Lys Arg Ser Xaa Gly Xaa Xaa Gln Xaa Gln Lys Met Lys
35 40 45

Arg Arg Lys Ala Lys Arg Xaa Xaa Xaa Arg Arg Gly Arg Glu Gly Arg
50 55 60

Leu Ala Ser Gln Met Pro Lys Met Gly Ile His Thr Xaa Pro Met Thr
65 70 75 80

Ser Val Thr Gln Arg Arg Lys Cys Leu Lys Tyr Thr Leu Gln Arg Arg
85 90 95

Gln Thr His Arg Arg Pro Arg Asn Pro Arg Lys Trp Ser
100 105

<210> 98
<211> 106
<212> PRT
<213> Homo sapien

<400> 98

Pro Gly Leu Ile Pro Leu Glu Asp Lys Glu Asp Tyr Gly Pro Asn Lys
1 5 10 15

Glu Cys Pro Leu Cys Leu Cys Pro Arg Leu Phe Glu Ser Leu Ser Arg
20 25 30

Asp Leu Lys Lys Asp Tyr Gly Val Tyr Leu Glu Asp Ser Gly Thr His
35 40 45

129

Cys Leu Glu Val Ser Val Gln Ile Phe Ile Asp Asp Lys Gly Ile Leu
50 55 60

Arg Gln Ile Thr Leu Asn Asp Leu Pro Val Gly Arg Ser Val Asp Glu
65 70 75 80

Thr Leu Arg Leu Val Gln Ala Phe Gln Tyr Thr Asp Lys His Gly Glu
85 90 95

Val Cys Pro Ala Gly Trp Lys Pro Gly Lys
100 105

<210> 99

<211> 75

<212> PRT

<213> Homo sapien

<400> 99

Ile Pro Lys Ser Arg Ser Gln Lys Asp Tyr Gly Val Tyr Leu Glu Asp
1 5 10 15

Ser Gly His Thr Leu Arg Gly Leu Phe Ile Ile Asp Asp Lys Gly Ile
20 25 30

Leu Arg Gln Ile Thr Leu Asn Asp Leu Pro Val Gly Arg Ser Val Asp
35 40 45

Glu Thr Leu Arg Leu Val Gln Ala Phe Gln Tyr Thr Asp Lys His Gly
50 55 60

Glu Val Cys Pro Ala Gly Trp Lys Pro Gly Lys
65 70 75

<210> 100

<211> 224

<212> PRT

<213> Homo sapien

<400> 100

Met Ser Tyr Leu Lys Arg Leu Cys Gly Thr Phe Leu Gly Gly Pro Lys
1 5 10 15

Pro Pro Gln Arg Val Met Phe Thr Glu Asp Leu Lys Leu Pro Ala Ser
20 25 30

Phe Asp Ala Arg Glu Gln Trp Pro Gln Cys Pro Thr Ile Lys Glu Ile
35 40 45

130

Arg Asp Gln Gly Ser Cys Gly Ser Cys Trp Ala Phe Gly Ala Val Glu
50 55 60

Ala Ile Ser Asp Arg Ile Cys Ile Gln His Gln Cys Ala Arg Arg Ala
65 70 75 80

Trp Arg Cys Arg Arg Arg Thr Cys Ser His Ala Val Ala Ala Cys Val
85 90 95

Gly Thr Ala Val Met Val Ala Ile Leu Leu Lys Leu Gly Thr Ser Gly
100 105 110

Gln Glu Lys Ala Trp Phe Leu Val Ala Ile Tyr Glu Ser His Val Gly
115 120 125

Cys Arg Pro Tyr Phe His Thr Leu Pro Val Ser Thr Thr Ser Lys Gly
130 135 140

Ser Arg Pro Pro Cys Thr Gly Glu Gly Asp Thr Pro Lys Cys Ser Lys
145 150 155 160

Ser Cys Glu Pro Gly Tyr Arg Pro Ser Tyr Lys Gln Asp Lys Arg Tyr
165 170 175

Gly Tyr Asn Ser Tyr Ser Val Ser Asn Ser Glu Lys Asp Ile Met Ala
180 185 190

Glu Ile Ser Lys Asn Gly Pro Trp Arg Glu Leu Ser Leu Cys Ile Gly
195 200 205

Leu Pro Gly Leu Glu Val Arg Glu Cys Thr Asn Thr Ser Pro Glu Arg
210 215 220

<210> 101
<211> 181
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<400> 101

Pro Leu Arg Gln Arg Gln Pro Leu Arg Cys Ala Gln Ala Gly Leu Xaa
1 5 10 15

Ala Leu Xaa Xaa Ser Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ser Xaa Xaa
20 25 30

Ser Xaa Leu Ser Xaa Ser Leu Cys Cys Leu Leu Val Leu Ala Asn Ala
35 40 45

Arg Ser Arg Pro Ser Phe His Pro Leu Ser Asp Glu Leu Val Asn Tyr
50 55 60

Val Asn Lys Arg Asn Thr Thr Trp Gln Ala Gly His Asn Phe Tyr Asn
65 70 75 80

Val Asp Met Ser Tyr Leu Lys Arg Leu Cys Gly Thr Phe Leu Gly Gly
85 90 95

132

Pro Lys Pro Pro Gln Arg Val Met Phe Thr Glu Asp Leu Lys Leu Pro
100 105 110

Ala Ser Phe Asp Ala Arg Glu Gln Trp Pro Gln Cys Pro Thr Ile Lys
115 120 125

Glu Ile Arg Asp Gln Gly Ser Cys Gly Ser Cys Trp Ala Phe Gly Ala
130 135 140

Val Glu Ala Ile Ser Asp Arg Ile Xaa Ile His Thr Asn Ala His Val
145 150 155 160

Glu Arg Gly Gly Val Gly Gly Pro Ala His Xaa Leu Trp Gln His
165 170 175

Val Trp Gly Arg Leu
180

<210> 102

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<223> X=any amino acid

<400> 102

Thr Ser Leu His Glu Asp Asp Trp Arg Ser Arg Pro Ser Arg Gly Pro
1 5 10 15

Ala Leu Thr Pro Ile Arg Asp Glu Glu Trp Gly Gly His Ser Pro Arg
20 25 30

Ser Pro Arg Gly Trp Asp Gln Glu Pro Ala Arg Glu Xaa Ala Gly Gly
35 40 45

Gly Trp Arg Ala Arg Arg Pro Arg Ala Arg Ser Asp Arg Arg His Trp
50 55 60

Thr Thr Ser Pro Arg Arg Ala Pro His Glu Ser Gly Ser Xaa Ser Pro
65 70 75 80

Thr Asn Asn Gly Xaa Arg Ser Arg Ala Tyr Met Pro Thr Val Asp Pro
85 90 95

His Val Arg Asp Asp Leu Leu Trp Thr Lys Tyr Asn Ser Arg Asp Ile
100 105 110

Pro Thr Ala Thr Thr Gly Asp Pro Leu Leu Leu Tyr Asn Ile Gln Ala
115 120 125

Leu Arg Asp Ala Ala Leu Leu Ser Tyr Pro Met Val Pro Thr His His
130 135 140

Ala Tyr Leu Gly Thr Leu Trp Asp Lys Arg Leu Pro Gly Ser Gly Asp
145 150 155 160

Leu Pro Tyr Asp Gly Arg Leu Leu Glu Glu Ala Val Arg Lys Lys Gly
165 170 175

Gly Arg Arg Arg Arg Arg Ile Pro His Lys Glu Glu Glu Glu Ala
180 185 190

Tyr Tyr Pro Pro Ala Pro Pro Tyr Ser Glu Thr Asp Ser Gln Ala
195 200 205

Ser Arg Glu Arg Arg Leu Lys Lys Asn Leu Ala Leu Ser Arg Glu Ser
210 215 220

Leu Val Val
225

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<400> 103

Ser Pro Pro Ser Thr Arg Thr Ile Gly Xaa Leu Gly Leu Pro Gly Ala
1 5 10 15

Leu Pro Ser Pro Arg Ser Gly Met Arg Ser Gly Val Ala Thr Pro Pro
20 25 30

Gly Val Pro Gly Asp Gly Thr Arg Ser Pro Pro Gly Xaa Arg Gln Ala
35 40 45

Gly Ala Gly Gly Pro Gly Gly Pro Gly Pro Xaa Pro Ile Asp Ala Thr
50 55 60

Gly Arg Pro His Pro Ala Glu His Arg Thr Ser Gln Gly Ala Xaa Leu
65 70 75 80

Pro Arg Ile Met Val Xaa Glu Ala Gly His Tyr Met Pro Pro Gln Ser
85 90 95

Pro Ser Arg Asp Asp Leu Tyr Asp Gln Asp Asn Ser Arg Asp Ile Pro
100 105 110

Thr Leu Pro Gln Ala Thr Pro Ile Tyr Asp Asn Ile Gln Ala Pro Arg
115 120 125

Glu Arg Pro Pro Ala Tyr Pro Arg Ser His His His Arg Thr Arg Asp
130 135 140

135

Pro Arg Asp Asn Gly Ser Arg Ser Gly Asp Leu Pro Tyr Asp Gly Arg
145 150 155 160

Leu Leu Glu Glu Ala Val Arg Lys Lys Gly Val Gly Gly Glu Asp
165 170 175

Thr Pro Gln Gly Gly Gly Arg Gly Leu Leu Pro Ala Arg Ala Ala
180 185 190

Pro Val Leu Gly Asp Arg Leu Ala Gly Val Pro Arg Ala Gln Ala Gln
195 200 205

Glu Glu Leu Gly Pro Glu Ser Gly Lys Phe Ser Arg Leu Ile
210 215 220

<210> 104

<211> 74

<212> PRT

<213> Homo sapien

<400> 104

Met Arg Leu Gly Val Phe Val Arg Arg Leu Leu Cys Val Pro Gly Arg
1 5 10 15

Gly Asp Asp Val Val Leu Val Val Val Cys Leu Trp Glu Pro His Val
20 25 30

Gly Thr Ala Val Gly Lys Tyr Tyr Arg Arg Ala Lys Cys Gly Gly Pro
35 40 45

Ser Ser Leu Asp Gly Ile Cys Met Met Ser Ser Glu Gly Arg Asp Val
50 55 60

Cys Gly Gly Leu Arg Phe Leu Ser Cys Ile
65 70

<210> 105

<211> 85

<212> PRT

<213> Homo sapien

<400> 105

Gly Val Cys Ser Gly Val Leu Leu Ala Trp Ser Asp Ala Ser Trp Ser
1 5 10 15

Phe Arg Glu Ala Pro Leu Cys Val Pro Gly Arg Gly Asp Asp Val Val
20 25 30

136

Leu Val Val Val Cys Leu Trp Glu Pro His Val Gly Thr Ala Val Gly
35 40 45

Lys Tyr Tyr Arg Arg Ala Lys Cys Gly Gly Pro Ser Ser Leu Asp Gly
50 55 60

Ile Cys Met Met Ser Ser Glu Gly Arg Asp Val Cys Gly Gly Leu Arg
65 70 75 80

Phe Leu Ser Cys Ile
85

<210> 106
<211> 85
<212> PRT
<213> Homo sapien

<400> 106

Gly Val Cys Ser Gly Val Leu Leu Ala Trp Ser Asp Ala Ser Trp Ser
1 5 10 15

Phe Arg Glu Ala Pro Leu Cys Val Pro Gly Arg Gly Asp Asp Val Val
20 25 30

Leu Val Val Val Cys Leu Trp Glu Pro His Val Gly Thr Ala Val Gly
35 40 45

Lys Tyr Tyr Arg Arg Ala Lys Cys Gly Gly Pro Ser Ser Leu Asp Gly
50 55 60

Ile Cys Met Met Ser Ser Glu Gly Arg Asp Val Cys Gly Gly Leu Arg
65 70 75 80

Phe Leu Ser Cys Ile
85

<210> 107
<211> 66
<212> PRT
<213> Homo sapien

<400> 107

Thr Gly Arg Leu Tyr Ser Pro Pro Glu Cys Arg Gly Lys Ser Leu Thr
1 5 10 15

Ser Lys Gly Pro Thr Lys Gln Phe Arg Asn Leu Pro Pro Val Asn Val

137

20

25

30

Pro Thr Thr Glu Val Ser Pro Thr Phe Ser Glu Asn His His Lys Asn
35 40 45

His His Thr Lys Cys Ser Ser Tyr Thr Glu Tyr Thr Cys Gln Gly Ser
50 55 60

Ser Arg
65

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<211> 66
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Thr Gly Arg Leu Tyr Ser Pro Pro Glu Cys Arg Gly Lys Ser Leu Thr
1 5 10 15

Ser Lys Gly Pro Thr Lys Gln Phe Arg Asn Leu Pro Pro Val Asn Val
20 25 30

Pro Thr Thr Glu Val Ser Pro Thr Ser Gln Lys Thr Thr Thr Lys Thr
35 40 45

Thr Thr Pro Asn Ala Xaa Ala Thr Arg Ser Thr Pro Ala Arg Asp Pro
50 55 60

Leu Glu
65

<210> 109
<211> 126
<212> PRT
<213> Homo sapien

<400> 109

Met Trp His Leu Ser Pro Phe Ala Leu Gly Ile Cys Asp Pro Ser Ile
1 5 10 15

Val Leu Arg Pro Leu Cys Pro His Phe Pro Val His Val Gly Asp Asp
20 25 30

138

Gly Ser Pro Phe Pro Phe Ala Gln Leu Pro Pro Gly Ala Arg Gly Pro
35 40 45

Ser Pro Gln Gly Val Trp Ile Tyr Ser Phe Ile Arg Pro Gly Pro Pro
50 55 60

Met Phe Ala Cys Leu Cys Thr Ser Thr Pro Asn Val Ser Ala Leu Pro
65 70 75 80

Pro Glu Ala Leu Cys Arg Ala Ser Leu Phe Trp Arg Gly Arg Gly Cys
85 90 95

Gly Val Thr Cys Thr Leu Gly Leu Val Asp Thr Val Asn Ser Ser Gln
100 105 110

Val Asp Phe Ser Gly Gly Glu Lys Lys Gly His Leu Arg Leu
115 120 125

<210> 110

<211> 117

<212> PRT

<213> Homo sapien

<400> 110

Leu Gly Pro Val Phe Ser Arg Ala Pro Phe Leu Thr Leu Val Trp Ile
1 5 10 15

Thr Cys Val Gly Met Trp His Leu Ser Pro Phe Ala Leu Gly Ile Cys
20 25 30

Asp Pro Ser Ile Val Leu Arg Pro Leu Cys Pro His Phe Pro Val His
35 40 45

Val Gly Asp Asp Gly Ser Pro Phe Pro Phe Ala Gln Leu Pro Pro Gly
50 55 60

Ala Arg Gly Pro Ser Pro Gln Gly Val Trp Ile Tyr Ser Phe Ile Arg
65 70 75 80

Pro Gly Pro Pro Met Phe Ala Cys Leu Cys Thr Ser Thr Pro Asn Val
85 90 95

Ser Ala Leu Pro Pro Glu Ala Leu Cys Arg Ala Ser Leu Phe Trp Glu
100 105 110

139

Asp Gly Gly Ala Val
115

<210> 111
<211> 170
<212> PRT
<213> Homo sapien

<400> 111

Met Tyr Phe Lys Asp Tyr Ile Gln Glu Arg Ser Asp Pro Val Glu Gln
1 5 10 15

Gly Lys Pro Val Ile Pro Ala Ala Val Leu Gly Arg Leu His Arg Lys
20 25 30

Trp Thr Tyr Ser Ala Val Ala Val Ser Pro Gly Ala Ala Ile Thr Gln
35 40 45

Ile Leu Pro Val Ile His Gln Leu Asp Trp Arg Leu Met Glu Phe Lys
50 55 60

Leu Ala Asp Pro Asp Glu Val Ala Ala Ser Gly Glu Arg Gly Leu Ala
65 70 75 80

His Asp Glu Leu Arg Glu Ala Glu Pro Gly Leu Thr Leu Leu Arg
85 90 95

Leu Glu His His Ala Gln Asp Val Gly Glu Ser Ala Thr Cys Ser Arg
100 105 110

Leu Asn Val Arg Thr Ser Glu Thr Cys Leu Gly Phe Gln Arg Pro Glu
115 120 125

Gly Thr Val Thr Arg Ile Thr Trp Ala Val Thr Thr Pro Tyr Thr Gly
130 135 140

Arg Tyr Leu Thr Phe Arg Pro Gly Thr His Pro Leu Asn Pro Ala Pro
145 150 155 160

Gln Gly Phe Val Val Pro Val Gly Cys Pro
165 170

<210> 112
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<223> X=any amino acid

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<222> (113)..(113)
<223> X=any amino acid

<400> 112

Lys Asp Phe Asp Ser Pro Glu Asn Gly Ala Asp Ser Phe Gln Ser Ser
1 5 10 15

Asp Ser Leu Leu Gln Ser Trp Asn Ser Gln Ser Ser Leu Leu Asp Val
20 25 30

Gln Arg Val Pro Ser Phe Glu Ser Xaa Xaa Xaa Asp Cys Xaa Xaa Xaa
35 40 45

Leu Xaa Leu Asn Lys Pro Thr Cys Xaa Ser Arg Ile Thr Ser Lys Arg
50 55 60

Gly Val Thr Xaa Trp Ser Lys Ala Asn Gln Leu Tyr Leu Gln Leu Cys
65 70 75 80

Trp Pro Ala Ser Gln Glu Val Asp Leu Phe Ser Cys Gly Ser Xaa Ser
85 90 95

Trp Ser Cys Tyr Xaa Thr Asn Pro Ala Ser His Ser Ser Xaa Gly Leu
100 105 110

Xaa Thr Asp Gly Ser Leu Ser Ser Pro Thr Pro Met Arg Trp Pro Ala
115 120 125

Ser Gly Glu Arg Gly Leu Ala His Asp Glu Leu Arg Glu Ala Glu Pro
130 135 140

Gly Leu Thr Leu Leu Leu Arg Leu Glu His His Ala Gln Asp Val Gly
145 150 155 160

Glu Ser Ala Thr Cys Ser Arg Leu Asn Val Arg Thr Ser Glu Thr Cys
165 170 175

Leu Gly Phe Gln Arg Pro Glu Gly Thr Val Thr Arg Ile Thr Trp Ala
180 185 190

Val Thr Thr Pro Tyr Thr Gly Arg Tyr Leu Thr Phe Arg Pro Gly Thr
195 200 205

His Pro Leu Asn Pro Ala Pro Gln Gly Phe Val Val Pro Val Gly Cys
210 215 220

Pro
225

<210> 113
<211> 175
<212> PRT
<213> Homo sapien

<400> 113

142

Gly Gly Glu Glu Gly Arg Ala Ser Trp Gly Gln Cys Arg Leu Phe Gly
1 5 10 15

Pro Gly Lys Leu Arg Trp Ala Gly Leu Pro Pro Val Trp Leu Cys Gln
20 25 30

Gly His Pro Gly Val Leu His Leu Gly Pro Gly Gly Trp Glu Gly Arg
35 40 45

Glu Ala Phe Gly Leu Leu Asn His Leu Glu Val Ser Leu Leu Gln Thr
50 55 60

Ser Ala Gly Ser Gly Ser Pro Gly Val Met Gly Ser Gly Trp Leu Asn
65 70 75 80

Leu Glu Ile Val Trp Ser Leu Phe Glu Gly Pro Ala Trp Leu Leu Leu
85 90 95

Gln Arg Asn Cys Arg His Leu Ser Phe Pro Ser Leu Pro His Pro Thr
100 105 110

Ala Glu Lys Gly Trp Arg Gly Glu Ser Ser Ser Ala Phe His Ser Val
115 120 125

Tyr Val Ser Gly Asp Ser Arg Gly Ala Gly Leu Lys Ile Ala Gly Gly
130 135 140

Arg Pro Ser Pro Gly Cys Cys Ser Val Gly Ala Trp Pro Ser Ser Ser
145 150 155 160

Arg Pro Thr Cys Phe Leu Trp Cys Gly Gln Ser Gln Leu Pro Ser
165 170 175

<210> 114

<211> 270

<212> PRT

<213> Homo sapien

<400> 114

Met Asp Asp Gln Arg Asp Leu Ile Ser Asn Asn Glu Gln Leu Pro Met
1 5 10 15

Leu Gly Arg Arg Pro Gly Ala Pro Glu Ser Lys Cys Ser Arg Gly Ala
20 25 30

Leu Tyr Thr Gly Phe Ser Ile Leu Val Thr Leu Leu Leu Ala Gly Gln
35 40 45

Ala Thr Thr Ala Tyr Phe Leu Tyr Gln Gln Gln Gly Arg Leu Asp Lys
50 55 60

Leu Thr Val Thr Ser Gln Asn Leu Gln Leu Glu Asn Leu Arg Met Lys
65 70 75 80

Leu Pro Lys Pro Pro Lys Pro Val Ser Lys Met Arg Met Ala Thr Pro
85 90 95

Leu Leu Met Gln Ala Leu Pro Met Gly Ala Leu Pro Gln Gly Pro Met
100 105 110

Gln Asn Ala Thr Lys Tyr Gly Asn Met Thr Glu Asp His Val Met His
115 120 125

Leu Leu Gln Asn Ala Asp Pro Leu Lys Val Tyr Pro Pro Leu Lys Gly
130 135 140

Ser Phe Pro Glu Asn Leu Arg His Leu Lys Asn Thr Met Glu Thr Ile
145 150 155 160

Asp Trp Lys Val Phe Glu Ser Trp Met His His Trp Leu Leu Phe Glu
165 170 175

Met Ser Arg His Ser Leu Glu Gln Lys Pro Thr Asp Ala Pro Pro Lys
180 185 190

Val Leu Thr Lys Cys Gln Glu Glu Val Ser His Ile Pro Gly Cys Pro
195 200 205

Pro Gly Phe Ile Gln Ala Gln Val Arg Arg Glu Arg Gln Leu Ser Ala
210 215 220

Thr Pro Val Leu Trp Gly Ala Ser Ala Thr Ala Gly Val Ser Ser Pro
225 230 235 240

Thr Ala Arg Arg Ser Pro Thr Pro Glu Ala Ala Gly Thr Ile Thr Ala
245 250 255

Val Ser His Trp Asn Trp Arg Thr Arg Leu Leu Gly Trp Val
260 265 270

<210> 115
<211> 225
<212> PRT

144

<213> Homo sapien

<400> 115

Gly Arg Thr Gly Asp Ala Val Cys Cys Pro Pro Ala Leu Leu Asp Leu
1 5 10 15

Arg Gly Pro Pro Gly Pro Pro Ser Ala Gly Phe Asp Phe Ser Phe Leu
20 25 30

Pro Gln Pro Pro Gln Glu Lys Ala His Asp Gly Gly Arg Tyr Tyr Arg
35 40 45

Ala Asp Asp Ala Asn Val Val Arg Asp Arg Asp Leu Glu Val Asp Thr
50 55 60

Thr Leu Lys Ser Leu Ser Gln Gln Ile Glu Asn Ile Arg Ser Pro Glu
65 70 75 80

Gly Ser Arg Lys Asn Pro Ala Arg Thr Cys Cys Asp Leu Lys Met Cys
85 90 95

Gln Ser Asp Trp Lys Ser Gly Glu Tyr Trp Ile Asp Pro Asn Gln Gly
100 105 110

Cys Ser Leu Asp Ala Ile Lys Val Phe Met Arg Thr Met Glu Thr Gly
115 120 125

Glu Thr Leu Arg Val Pro His Ser Ala Ser Val Trp Arg Gln Lys Asn
130 135 140

Trp Tyr Ile Ser Lys Asn Pro Lys Asp Lys Arg His Val Trp Phe Gly
145 150 155 160

Glu Ser Met Thr Asp Gly Phe Gln Phe Glu Tyr Gly Gln Gly Ser
165 170 175

Asp Pro Ala Asp Val Ala Ile Gln Leu Thr Phe Leu Arg Leu Met Ser
180 185 190

Ser Glu Ala Phe Gln Asn Ile Thr Tyr His Cys Lys Asn Ser Val Ala
195 200 205

Tyr Met Asp His Gln Thr Gly Asn Leu Lys Lys Ala Leu Leu Leu Gln
210 215 220

Gly

145

225

<210> 116
<211> 121
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<223> X=any amino acid

<400> 116

Trp Ile Asp Pro Lys Leu Arg Leu Gln Ala Gly Cys His Pro Ile Arg
1 5 10 15

Cys Met Arg Ser Met Glu Thr Gly Glu Thr Leu Arg Val Pro His Ser
20 25 30

Ala Ser Val Trp Arg Gln Lys Asn Trp Tyr Ile Ser Lys Asn Pro Lys
35 40 45

Asp Lys Arg His Val Trp Phe Gly Glu Ser Met Thr Asp Gly Phe Gln
50 55 60

Phe Glu Tyr Gly Gly Gln Gly Ser Asp Pro Ala Asp Val Ala Ile Gln
65 70 75 80

Leu Thr Phe Leu Arg Leu Met Ser Xaa Glu Ala Phe Gln Asn Ile Thr
85 90 95

Tyr His Cys Lys Asn Ser Val Ala Tyr Met Asp His Gln Thr Gly Asn
100 105 110

Leu Lys Lys Ala Leu Leu Gln Gly
115 120

<210> 117
<211> 66
<212> PRT
<213> Homo sapien

<400> 117

Met Ala Leu Asn Arg Glu Phe Ser Phe Ile Val Ile Thr Thr Val Thr
1 5 10 15

Leu Thr Leu Cys Leu Ser Gly Leu Phe Ala Ile Leu Arg Ser Val Gly
20 25 30

Phe Pro Ile Phe Arg Asp Ile Ile Glu Leu Thr Ile Pro Tyr Tyr Gly
35 40 45

Phe Ile Phe Phe Pro Phe Lys His Ser Lys Glu Thr Ile Tyr Tyr Phe
50 55 60

Phe Pro
65

<210> 118
<211> 81
<212> PRT
<213> Homo sapien

<220>
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<222> (75)..(75)
<223> X=any amino acid

<400> 118

Gln Arg Val Leu Phe His Cys Asp His Tyr Arg Asp Thr Tyr Phe Val
1 5 10 15

Pro Ile Arg Thr Phe Cys Asn Ile Ala Leu Cys Arg Leu Ser Asn Leu
20 25 30

Gln Gly Tyr His Arg Ala Arg Pro Phe Pro Thr Met Asp Leu Phe Phe
35 40 45

Phe Leu Ser Asn Thr Val Arg Lys Gln Ser Ile Thr Phe Phe Leu Lys
50 55 60

Arg Arg Ile Tyr Ser Thr Val Ile Gln Leu Xaa Asn Ile Phe Arg Met
65 70 75 80

Met

<210> 119
<211> 253
<212> PRT
<213> Homo sapien

<400> 119

Met Val Asp Tyr Tyr Glu Val Leu Gly Val Gln Arg His Ala Leu Tyr
1 5 10 15

Pro Arg Asp Ser Tyr Lys Arg His Ile Gly Lys Leu Ala Leu Lys Trp
20 25 30

His Pro Asp Lys Asn Pro Glu Asn Lys Glu Glu Ala Ser Ser Arg Lys
35 40 45

Phe Lys Gln Val Ala Glu Ala Tyr Glu Val Leu Ser Asp Ala Lys Lys
50 55 60

Arg Asp Ile Tyr Asp Lys Tyr Gly Asn Arg Arg Ile Lys Val Val Glu
65 70 75 80

Asp Gly Gly Ser His Phe Asp Ser Pro Phe Glu Phe Gly Phe Thr
85 90 95

Phe Arg Asn Pro Asp Asp Val Phe Arg Glu Phe Phe Arg Trp Lys Gly
100 105 110

Pro Ile Leu His Leu Thr Ser Leu Lys Thr Leu Leu Arg Thr Ser Leu
115 120 125

Gly Ile Glu Gly Val Pro Glu Glu Ala Glu Ala Glu Gly Arg Gly Arg
130 135 140

Phe Asn Leu Arg Ser Val Asp Phe Arg Leu Leu Glu Ala Gly Trp Ser
145 150 155 160

Ser Met Asp Ala Gly Phe Thr Ser Leu Gly Ser Leu Gly His Gly Val
165 170 175

Leu Thr Leu Phe Ser Ser Thr Ser Phe Gly Gly Ser Gly Met Gly Asn
180 185 190

Tyr Lys Ser Ile Ser Thr Ser Thr Lys Leu Val Asn Gly Arg Pro Ile
195 200 205

Thr Thr Lys Arg Ile Val Asp Asn Ser Gln Asp Arg Val Gln Val Glu
210 215 220

Asp Asp Gly Gln Leu Lys Phe Leu Thr Ile Gly Tyr Glu Gln Leu Leu
225 230 235 240

Cys Leu Asp Asn Lys Met Ile Gln Arg Thr Arg Leu Ala
245 250

<210> 120
<211> 203
<212> PRT
<213> Homo sapien

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<223> X=any amino acid

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<222> (104)..(104)
<223> X=any amino acid

<400> 120

Arg Arg Ser Ser Ser Arg Lys Phe Lys Gln Val Ala Glu Ala Tyr Glu
1 5 10 15

Val Leu Ser Asp Ala Lys Lys Arg Asp Ile Tyr Asp Lys Tyr Gly Xaa
20 25 30

Arg Arg Ile Lys Trp Trp Arg Thr Glu Val Glu Val Ile Leu Thr Val
35 40 45

His Leu Asn Leu Ala Ser His Ser Val Thr Gln Met Met Ser Ser Gly
50 55 60

Asn Phe Leu Gly Gly Arg Asp Pro Phe Ser Phe Asp Phe Phe Glu Asp
65 70 75 80

Pro Phe Glu Asp Phe Phe Gly Asn Arg Arg Gly Pro Arg Gly Ser Arg
85 90 95

Ser Arg Gly Thr Gly Ser Phe Xaa Ser Ala Phe Ser Gly Phe Pro Ser
100 105 110

Phe Val Ser Gly Trp Ser Ser Met Asp Ala Gly Phe Thr Ser Leu Gly
115 120 125

Ser Leu Gly His Gly Val Leu Thr Leu Phe Ser Ser Thr Ser Phe Gly
130 135 140

Gly Ser Gly Met Gly Asn Tyr Lys Ser Ile Ser Thr Ser Thr Lys Leu
145 150 155 160

Val Asn Gly Arg Pro Ile Thr Thr Lys Arg Ile Val Asp Asn Ser Gln
165 170 175

149

Asp Arg Val Gln Val Glu Asp Asp Gly Gln Leu Lys Phe Leu Thr Ile
180 185 190

Gly Tyr Glu Gln Leu Leu Cys Leu Asp Asn Lys
195 200

<210> 121
<211> 128
<212> PRT
<213> Homo sapien

<400> 121

Met Ala Val Gln Ile Ser Lys Lys Arg Lys Phe Val Ala Asp Gly Ile
1 5 10 15

Phe Lys Ala Glu Leu Asn Glu Phe Leu Thr Arg Glu Leu Ala Glu Asp
20 25 30

Gly Tyr Ser Gly Val Glu Val Arg Val Thr Pro Thr Arg Thr Glu Ile
35 40 45

Ile Ile Leu Ala Thr Arg Thr Gln Asn Val Leu Gly Glu Lys Gly Arg
50 55 60

Arg Ile Arg Glu Leu Thr Ala Val Val Gln Lys Arg Phe Gly Phe Pro
65 70 75 80

Glu Gly Ser Val Glu Leu Tyr Ala Glu Lys Val Ala Thr Arg Gly Leu
85 90 95

Cys Ala Ile Ser Pro Gly Arg Val Ser Ala Val Pro Thr Pro Arg Arg
100 105 110

Ala Arg Cys Ala Ala Ser Phe Leu Ser Leu Ser Arg Thr Pro Met Gly
115 120 125

<210> 122
<211> 143
<212> PRT
<213> Homo sapien

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<223> X=any amino acid

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<223> X=any amino acid

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<223> X=any amino acid

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<223> X=any amino acid

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<222> (123)..(123)
<223> X=any amino acid

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<223> X=any amino acid

<400> 122

Lys Xaa Ala Thr Gly Ala Phe Leu Ser Ala Glu Arg Gly Gly Lys Met
1 5 10 15

Ala Val Gln Ile Ser Lys Lys Arg Lys Phe Val Ala Asp Gly Ile Phe
20 25 30

Lys Ala Glu Leu Asn Glu Phe Leu Thr Arg Glu Leu Ala Glu Asp Gly
35 40 45

Tyr Ser Gly Val Glu Val Arg Val Thr Pro Thr Arg Thr Glu Ile Ile
50 55 60

Ile Leu Ala Thr Arg Thr Gln Asn Val Leu Gly Glu Lys Gly Arg Arg
65 70 75 80

Ile Arg Glu Leu Thr Ala Val Val Gln Lys Arg Phe Gly Phe Pro Glu
85 90 95

Gly Ser Val Glu Leu Tyr Ala Glu Lys Val Ala Thr Arg Gly Leu Cys
100 105 110

Ala Ile Xaa Pro Ala Glu Xaa Leu Xaa Tyr Xaa Leu Xaa Xaa Gly Ser
115 120 125

Leu Arg Arg Val Phe Pro Ile Ala Val Pro His Ala His Gly Ala
130 135 140

<210> 123
<211> 75
<212> PRT
<213> Homo sapien

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<223> X=any amino acid

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<223> X=any amino acid

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<223> X=any amino acid

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<223> X=any amino acid

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<223> X=any amino acid

<400> 123

His Xaa Leu Gln Lys His Leu Ala Gly Leu Gly Leu Thr Glu Ala Ile
1 5 10 15

Asp Lys Asn Lys Xaa Xaa Xaa Xaa Arg Xaa Ser Gly Lys Lys Xaa Phe
20 25 30

Tyr Leu Ala Xaa Phe His Ala Thr Ala Phe Glu Leu Xaa Thr Asp Gly
35 40 45

152

Asn Pro Phe Asp Gln Asp Ile Tyr Gly Arg Glu Gly Gly Ala Ala Pro
50 55 60

Ser Cys Ser Thr Pro Thr Thr Pro Ser Ser Ser
65 70 75

<210> 124
<211> 110
<212> PRT
<213> Homo sapien

<400> 124

Cys Gly Thr Pro Lys Ala Ala Pro Cys Tyr Ser Leu Gly Ala Trp Ser
1 5 10 15

Gly Leu Arg Val Thr Arg Cys Glu Thr Ser Tyr Arg Ala Ser Gly Cys
20 25 30

Thr Gln Asp Gly Arg Arg His Pro Lys Ala Pro Glu Thr His Gly Cys
35 40 45

Tyr Trp Gly Trp Gly Gly Glu Val Pro Ala Leu Asp Thr Pro Trp
50 55 60

Gly Gly Gly Lys Thr Asp Arg Gly Ser Arg Val Pro Glu Arg Thr
65 70 75 80

Phe Pro Ala Arg Ile His Ser Thr Trp Thr Trp Ala Pro Asp Thr Met
85 90 95

Met Leu Ser Pro Glu Thr Pro His Pro Val Gly Pro Gly Pro
100 105 110

<210> 125
<211> 196
<212> PRT
<213> Homo sapien

<400> 125

Met Ser Pro Arg Phe Pro Ala Arg Pro Trp Val Val Lys Leu Val Ala
1 5 10 15

Ser Leu His Glu Asp Leu His Glu Val Ser Val Arg Ser Arg Pro Ser
20 25 30

Pro Val Pro Thr Pro Gly Trp Leu Gly Glu Gly Val Ala Leu Val Asp
35 40 45

153

Gly Pro Pro Val Gly Asp Pro Leu Ser Arg Val Pro Glu Pro Cys Arg
50 55 60

Val Arg Thr Lys Thr Val Lys Lys Ala Ala Arg Val Ile Ile Glu Lys
65 70 75 80

Tyr Tyr Thr Arg Leu Gly Asn Asp Phe His Thr Asn Lys Arg Val Cys
85 90 95

Glu Glu Ile Ala Ile Ile Pro Ser Lys Lys Leu Arg Asn Lys Ile Ala
100 105 110

Gly Tyr Val Thr His Leu Met Lys Arg Ile Gln Arg Gly Pro Val Arg
115 120 125

Gly Ile Ser Ile Lys Leu Gln Glu Glu Arg Glu Arg Arg Asp Asn
130 135 140

Tyr Val Pro Glu Val Ser Ala Leu Asp Gln Glu Ile Ile Glu Val Asp
145 150 155 160

Pro Asp Thr Lys Glu Met Leu Lys Leu Leu Asp Phe Gly Ser Leu Ser
165 170 175

Asn Leu Gln Val Thr Gln Pro Thr Val Gly Met Asn Phe Lys Thr Pro
180 185 190

Arg Gly Pro Val
195

<210> 126
<211> 207
<212> PRT
<213> Homo sapien

<400> 126

Met Pro Glu His Cys Gly Leu Gly His Arg Arg Cys Ala Cys Gln Gln
1 5 10 15

His Gly Ala Ser Pro Gly Arg Met Thr Phe Glu Gly Asp Thr Asp Val
20 25 30

Trp Ala Met Pro Gly Ser Trp Glu Gln Arg Pro Arg Ala Gly Pro Gly
35 40 45

Val Arg Ala Ala Arg Ala Gly Gly Phe Trp Glu Pro Lys Ala Arg Leu

154

50

55

60

Arg Leu Gln Thr Leu Gly Pro Asn Met Gly Arg Val Arg Thr Lys Thr
65 70 75 80

Val Lys Lys Ala Ala Arg Val Ile Ile Glu Lys Tyr Tyr Thr Arg Leu
85 90 95

Gly Asn Asp Phe His Thr Asn Lys Arg Val Cys Glu Glu Ile Ala Ile
100 105 110

Ile Pro Ser Lys Lys Leu Arg Asn Lys Ile Ala Gly Tyr Val Thr His
115 120 125

Leu Met Lys Arg Ile Gln Arg Gly Pro Val Arg Gly Ile Ser Ile Lys
130 135 140

Leu Gln Glu Glu Glu Arg Glu Arg Arg Asp Asn Tyr Val Pro Glu Val
145 150 155 160

Ser Ala Leu Asp Gln Glu Ile Ile Glu Val Asp Pro Asp Thr Lys Glu
165 170 175

Met Leu Lys Leu Leu Asp Phe Gly Ser Leu Ser Asn Leu Gln Val Thr
180 185 190

Gln Pro Thr Val Gly Met Asn Phe Lys Thr Pro Arg Gly Pro Val
195 200 205

<210> 127

<211> 180

<212> PRT

<213> Homo sapien

<400> 127

Gly Gly His Arg Cys Leu Gly Asn Ala Arg Val Leu Gly Thr Glu Ala
1 5 10 15

Pro Ser Arg Thr Arg Ser Ala Gly Ser Ala Gly Arg Gly Leu Leu Gly
20 25 30

Ala Lys Gly Glu Ala Glu Val Ala Asn Ser Gly Ala Asn Met Gly Arg
35 40 45

Val Arg Thr Lys Thr Val Lys Lys Ala Ala Arg Val Ile Ile Glu Lys
50 55 60

155

Tyr Tyr Thr Arg Leu Gly Asn Asp Phe His Thr Asn Lys Arg Val Cys
65 70 75 80

Glu Glu Ile Ala Ile Ile Pro Ser Lys Lys Leu Arg Asn Lys Ile Ala
85 90 95

Gly Tyr Val Thr His Leu Met Lys Arg Ile Gln Arg Gly Pro Val Arg
100 105 110

Gly Ile Ser Ile Lys Leu Gln Glu Glu Arg Glu Arg Arg Asp Asn
115 120 125

Tyr Val Pro Glu Val Ser Ala Leu Asp Gln Glu Ile Ile Glu Val Asp
130 135 140

Pro Asp Thr Lys Glu Met Leu Lys Leu Leu Asp Phe Gly Ser Leu Ser
145 150 155 160

Asn Leu Gln Val Thr Gln Pro Thr Val Gly Met Asn Phe Lys Thr Pro
165 170 175

Arg Gly Pro Val
180

<210> 128
<211> 150
<212> PRT
<213> Homo sapien

<400> 128

Met Gly Arg Val Arg Thr Lys Thr Val Lys Lys Ala Ala Arg Val Ile
1 5 10 15

Ile Glu Lys Tyr Tyr Thr Arg Leu Gly Asn Asp Phe His Thr Asn Lys
20 25 30

Arg Val Cys Glu Glu Ile Ala Ile Ile Pro Ser Lys Lys Leu Arg Asn
35 40 45

Lys Ile Ala Gly Tyr Val Thr His Leu Met Lys Arg Ile Gln Arg Gly
50 55 60

Pro Val Arg Gly Ile Ser Ile Lys Leu Gln Glu Glu Arg Glu Arg
65 70 75 80

Arg Asp Asn Tyr Val Pro Glu Val Ser Ala Leu Asp Gln Glu Ile Ile

156
85 90 95

Glu Val Asp Pro Asp Thr Lys Glu Met Leu Lys Leu Leu Asp Phe Gly
100 105 110

Ser Leu Ser Asn Leu Gln Val Ile His Pro Asn Cys Arg Leu Ser Asp
115 120 125

Leu Lys Val Gly Gln Thr Ala Gln Pro Thr Val Gly Met Asn Phe Lys
130 135 140

Thr Pro Arg Gly Pro Val
145 150

<210> 129
<211> 298
<212> PRT
<213> Homo sapien

<400> 129

Met Arg Leu Ala Ala Leu Ala Val Ser Ala Cys Ile Leu Phe Arg Glu
1 5 10 15

Ala Leu Leu Arg Pro Trp Thr Gly Pro Pro Glu Arg Met Pro Val Arg
20 25 30

Ala Ala Arg Gly Glu Gly Pro Val Ala Met Gly Arg Val Ile Arg Gly
35 40 45

Gln Arg Lys Gly Ala Gly Ser Val Phe Arg Ala His Val Lys His Arg
50 55 60

Lys Gly Ala Ala Arg Leu Arg Ala Val Asp Phe Ala Glu Arg His Gly
65 70 75 80

Tyr Ile Lys Gly Ile Val Lys Asp Ile Ile His Asp Pro Gly Arg Gly
85 90 95

Ala Pro Leu Ala Lys Val Val Phe Arg Asp Pro Tyr Arg Phe Lys Lys
100 105 110

Arg Thr Glu Leu Phe Ile Ala Ala Glu Gly Ile His Thr Gly Gln Phe
115 120 125

Val Tyr Cys Gly Lys Lys Ala Gln Leu Asn Ile Gly Asn Val Leu Pro
130 135 140

157

Val Gly Thr Met Pro Glu Gly Thr Ile Val Cys Cys Leu Glu Glu Lys
145 150 155 160

Pro Gly Asp Arg Gly Lys Leu Ala Arg Ala Ser Gly Asn Tyr Ala Thr
165 170 175

Val Ile Ser His Asn Pro Glu Thr Lys Lys Thr Arg Val Lys Leu Pro
180 185 190

Ser Gly Ser Lys Lys Val Ile Ser Ser Ala Asn Arg Ala Val Val Gly
195 200 205

Val Val Ala Gly Gly Arg Ile Asp Lys Pro Ile Leu Lys Ala Gly
210 215 220

Arg Ala Tyr His Lys Tyr Lys Ala Lys Arg Asn Cys Trp Pro Arg Val
225 230 235 240

Arg Gly Val Ala Met Asn Pro Val Glu His Pro Phe Gly Gly Asn
245 250 255

His Gln His Ile Gly Lys Pro Ser Thr Ile Arg Arg Asp Ala Pro Ala
260 265 270

Gly Arg Lys Val Gly Leu Ile Ala Ala Arg Arg Thr Gly Arg Leu Arg
275 280 285

Gly Thr Lys Thr Val Gln Glu Lys Glu Asn
290 295

<210> 130
<211> 271
<212> PRT
<213> Homo sapien

<220>
<221> MISC_FEATURE
<222> (1)..(2)
<223> X=any amino acid

<400> 130

Xaa Xaa Ala Gly Ala Gly Ala Arg Gly Glu Gly Pro Val Ala Met Gly
1 5 10 15

Arg Val Ile Arg Gly Gln Arg Lys Gly Ala Gly Ser Val Phe Arg Ala
20 25 30

158

His Val Lys His Arg Lys Gly Ala Ala Arg Leu Arg Ala Val Asp Phe
35 40 45

Ala Glu Arg His Gly Tyr Ile Lys Gly Ile Val Lys Asp Ile Ile His
50 55 60

Asp Pro Gly Arg Gly Ala Pro Leu Ala Lys Val Val Phe Arg Asp Pro
65 70 75 80

Tyr Arg Phe Lys Lys Arg Thr Glu Leu Phe Ile Ala Ala Glu Gly Ile
85 90 95

His Thr Gly Gln Phe Val Tyr Cys Gly Lys Lys Ala Gln Leu Asn Ile
100 105 110

Gly Asn Val Leu Pro Val Gly Thr Met Pro Glu Gly Thr Ile Val Cys
115 120 125

Cys Leu Glu Glu Lys Pro Gly Asp Arg Gly Lys Leu Ala Arg Ala Ser
130 135 140

Gly Asn Tyr Ala Thr Val Ile Ser His Asn Pro Glu Thr Lys Lys Thr
145 150 155 160

Arg Val Lys Leu Pro Ser Gly Ser Lys Lys Val Ile Ser Ser Ala Asn
165 170 175

Arg Ala Val Val Gly Val Val Ala Gly Gly Arg Ile Asp Lys Pro
180 185 190

Ile Leu Lys Ala Gly Arg Ala Tyr His Lys Tyr Lys Ala Lys Arg Asn
195 200 205

Cys Trp Pro Arg Val Arg Gly Val Ala Met Asn Pro Val Glu His Pro
210 215 220

Phe Gly Gly Asn His Gln His Ile Gly Lys Pro Ser Thr Ile Arg
225 230 235 240

Arg Asp Ala Pro Ala Gly Arg Lys Val Gly Leu Ile Ala Ala Arg Arg
245 250 255

Thr Gly Arg Leu Arg Gly Thr Lys Thr Val Gln Glu Lys Glu Asn
260 265 270

159

<210> 131

<211> 550

<212> PRT

<213> Homo sapien

<400> 131

Met Met Lys Ala Ala Gly Lys Gln Gln Arg Val Gln Gln His Ser
1 5 10 15

Ser Ala Gln His Gln Gln His Ala Cys Thr Ala Asn Ser Pro Lys His
20 25 30

Arg Lys His Val Gly Ser Ser Met Gln Ala Gly Met His Ser Arg Ser
35 40 45

Gln Ala Ser Ser Thr Ala Gln Gln Gln Leu Lys His Ser Ile Gln Gln
50 55 60

Gln Gln Ile Pro Leu His Pro Gly Thr Ala Thr Gln Thr Ser Thr Lys
65 70 75 80

Pro Ile Trp Thr Arg Asn Pro Asp Asp Ile Thr Gln Glu Glu Tyr Gly
85 90 95

Glu Phe Tyr Lys Ser Leu Thr Asn Asp Trp Glu Asp His Leu Ala Val
100 105 110

Lys His Phe Ser Val Glu Gly Gln Leu Glu Phe Arg Ala Leu Leu Phe
115 120 125

Ile Pro Arg Arg Ala Pro Phe Asp Leu Cys Glu Asn Lys Lys Lys Lys
130 135 140

Asn Asn Ile Lys Leu Tyr Val Arg Arg Val Phe Ile Met Asp Ser Cys
145 150 155 160

Asp Glu Leu Ile Pro Glu Tyr Leu Asn Phe Ile Arg Gly Val Val Asp
165 170 175

Ser Glu Asp Leu Pro Leu Asn Ile Ser Arg Glu Met Leu Gln Gln Ser
180 185 190

Lys Ile Leu Lys Val His Ser Gln Gln Thr Leu Leu Arg Ser Ala Leu
195 200 205

Ser Ser Ser Leu Glu Leu Ala Glu Asp Lys Ala Glu Leu Gln Asp Asn
210 215 220

160

Ser Tyr Glu Gly Thr Ser His Lys Asn Leu Asn Ala Trp Asn Pro Arg
225 230 235 240

Arg His Pro Leu Thr Gly Ala Ala Cys Leu Glu Leu Leu Arg Tyr His
245 250 255

Thr Ser Gln Ser Gly Asp Glu Met Thr Ser Leu Ser Glu Tyr Val Ser
260 265 270

Arg Met Lys Glu Thr Gln Lys Ser Ile Tyr Tyr Ile Thr Gly Glu Ser
275 280 285

Lys Glu Gln Val Ala Asn Ser Ala Phe Val Glu Arg Val Arg Lys Arg
290 295 300

Gly Phe Glu Val Val Tyr Met Thr Glu Pro Ile Asp Glu Tyr Cys Val
305 310 315 320

Gln Gln Leu Lys Glu Phe Asp Gly Lys Ser Leu Val Ser Val Thr Lys
325 330 335

Glu Gly Leu Glu Leu Pro Glu Asp Glu Glu Glu Lys Lys Lys Met Glu
340 345 350

Glu Ser Lys Ala Lys Phe Glu Asn Leu Cys Lys Leu Met Lys Glu Ile
355 360 365

Leu Asp Lys Lys Val Glu Lys Val Thr Ile Ser Asn Arg Leu Val Ser
370 375 380

Ser Pro Cys Cys Ile Val Thr Ser Thr Tyr Gly Trp Thr Ala Asn Met
385 390 395 400

Glu Arg Ile Met Lys Ala Gln Ala Leu Arg Asp Asn Ser Thr Met Gly
405 410 415

Tyr Met Met Ala Lys Lys His Leu Glu Ile Asn Pro Asp His Pro Ile
420 425 430

Val Glu Thr Leu Arg Gln Lys Ala Glu Ala Asp Glu Asn Asp Lys Ala
435 440 445

Val Lys Asp Leu Val Val Leu Leu Phe Glu Thr Ala Leu Val Ser Ser
450 455 460

161

Gly Phe Ser Leu Glu Asp Pro Gln Thr Gln Ser Asn Arg Ile Tyr Arg
465 470 475 480

Met Ile Lys Leu Gly Leu Gly Ile Asp Glu Asp Glu Val Ala Ala Glu
485 490 495

Glu Pro Asn Ala Ala Val Pro Asp Glu Ile Pro Pro Leu Glu Gly Asp
500 505 510

Glu Asp Ala Ser Arg Met Arg Gly Ser Arg Val Arg Leu Gly Val Val
515 520 525

Leu Gly Asn Thr Cys Ala Phe Gly Phe Cys Val Pro His Gly Ala Pro
530 535 540

Thr Ala Pro Arg Val Pro
545 550

<210> 132
<211> 190
<212> PRT
<213> Homo sapien

<220>
<221> MISC_FEATURE
<222> (181)..(181)
<223> X=any amino acid

<400> 132

Glu Leu Leu Arg Tyr His Thr Ser Gln Ser Gly Asp Glu Met Thr Ser
1 5 10 15

Leu Ser Glu Tyr Val Ser Arg Met Lys Glu Thr Gln Lys Ser Ile Tyr
20 25 30

Tyr Ile Thr Gly Glu Ser Lys Glu Gln Val Ala Asn Ser Ala Phe Val
35 40 45

Glu Arg Val Arg Lys Arg Gly Phe Glu Val Val Tyr Met Thr Glu Pro
50 55 60

Ile Asp Glu Tyr Cys Val Gln Gln Leu Lys Glu Phe Asp Gly Lys Ser
65 70 75 80

Leu Val Ser Val Thr Lys Glu Gly Leu Glu Leu Pro Glu Asp Glu Glu
85 90 95

162

Glu Lys Lys Lys Met Glu Glu Ser Lys Ala Lys Phe Glu Asn Leu Cys
100 105 110

Lys Leu Met Lys Glu Ile Leu Asp Lys Lys Val Glu Lys Val Thr Ile
115 120 125

Ser Asn Arg Leu Val Ser Ser Pro Cys Cys Ile Val Thr Ser Thr Tyr
130 135 140

Gly Trp Thr Ala Asn Met Glu Arg Ile Met Lys Ala Gln Ala Leu Arg
145 150 155 160

Asp Asn Ser Thr Met Gly Tyr Met Met Ala Lys Lys His Leu Glu Ile
165 170 175

Asn Pro Asp His Xaa His Cys Gly Asp Ala Ala Ala Glu Gly
180 185 190

<210> 133

<211> 111

<212> PRT

<213> Homo sapien

<400> 133

Met Gly Val Asp Ile Arg His Asn Lys Asp Arg Lys Val Arg Arg Lys
1 5 10 15

Glu Pro Lys Ser Gln Asp Ile Tyr Leu Arg Leu Leu Val Lys Leu Tyr
20 25 30

Arg Phe Leu Ala Arg Arg Thr Asn Ser Thr Phe Asn Gln Val Val Leu
35 40 45

Lys Arg Leu Phe Met Ser Arg Thr Asn Arg Pro Pro Leu Ser Leu Ser
50 55 60

Arg Met Ile Arg Lys Met Lys Leu Pro Gly Arg Glu Asn Lys Thr Ala
65 70 75 80

Val Val Val Gly Thr Ile Thr Asp Asp Val Arg Val Gln Glu Val Pro
85 90 95

Arg Arg Asp His Ala Ser Ile Thr Leu Arg Arg Ser Thr Cys Ile
100 105 110

<210> 134

163

<211> 261

<212> PRT

<213> Homo sapien

<400> 134

Phe Pro Arg Glu Ser Gly Pro Arg Pro Val Pro Arg Thr Asp Ser Gly
1 5 10 15

Ala Ser Val Gly Ala Gly Cys Leu Arg Thr Leu Ala Val Gly Pro Gly
20 25 30

Gln Glu Gly Ala Gly Gly Arg Asp Ser Gly Cys Thr Val Ile Trp Arg
35 40 45

Ser Ala Ala Gly Pro Thr Gly Ile Arg Gly Phe Gly Gly Ala Arg Arg
50 55 60

Pro Gly Ser Glu Leu Gly Ser Cys Cys Ala Ala His Val Leu Thr Ser
65 70 75 80

Ala Ser Asp Val Trp Ser Tyr Gly Ile Val Met Trp Glu Val Met Ser
85 90 95

Tyr Gly Glu Arg Pro Tyr Trp Asp Met Ser Asn Gln Asp Val Ile Asn
100 105 110

Ala Val Glu Gln Asp Tyr Arg Leu Pro Pro Pro Met Asp Cys Pro Thr
115 120 125

Ala Leu His Gln Leu Met Leu Asp Cys Trp Val Arg Asp Arg Asn Leu
130 135 140

Arg Pro Lys Phe Ser Gln Ile Val Asn Thr Leu Asp Lys Leu Ile Arg
145 150 155 160

Asn Ala Ala Ser Leu Lys Val Ile Ala Ser Ala Gln Ser Gly Met Ser
165 170 175

Gln Pro Leu Leu Asp Arg Thr Val Pro Asp Tyr Thr Thr Phe Thr Thr
180 185 190

Val Gly Asp Trp Leu Asp Ala Ile Lys Met Gly Arg Tyr Lys Glu Ser
195 200 205

Phe Val Ser Ala Gly Phe Ala Ser Phe Asp Leu Val Ala Gln Met Thr
210 215 220

164

Ala Glu Asp Leu Leu Arg Ile Gly Val Thr Leu Ala Gly His Gln Lys
225 230 235 240

Lys Ile Leu Ser Ser Ile Gln Asp Met Arg Leu Gln Met Asn Gln Thr
245 250 255

Leu Pro Val Gln Val
260

<210> 135
<211> 361
<212> PRT
<213> Homo sapien

<400> 135

Met Pro Gly Val Cys Asp Arg Ala Pro Asp Phe Leu Ser Pro Ser Glu
1 5 10 15

Asp Gln Val Leu Arg Pro Ala Leu Gly Ser Ser Val Ala Leu Asn Cys
20 25 30

Thr Ala Trp Val Val Ser Gly Pro His Cys Ser Leu Pro Ser Val Gln
35 40 45

Trp Leu Lys Asp Gly Leu Pro Leu Gly Ile Gly Gly His Tyr Ser Leu
50 55 60

His Glu Tyr Ser Trp Val Lys Ala Asn Leu Ser Glu Val Leu Val Ser
65 70 75 80

Ser Val Leu Gly Val Asn Val Thr Ser Thr Glu Val Tyr Gly Ala Phe
85 90 95

Thr Cys Ser Ile Gln Asn Ile Ser Phe Ser Ser Phe Thr Leu Gln Arg
100 105 110

Ala Gly Pro Thr Ser His Val Ala Ala Val Leu Ala Ser Leu Leu Val
115 120 125

Leu Leu Ala Leu Leu Ala Ala Leu Leu Tyr Val Lys Cys Arg Leu
130 135 140

Asn Val Leu Leu Trp Tyr Gln Asp Ala Tyr Gly Glu Val Glu Ile Asn
145 150 155 160

Asp Gly Lys Leu Tyr Asp Ala Tyr Val Ser Tyr Ser Asp Cys Pro Glu

165
165 170 175

Asp Arg Lys Phe Val Asn Phe Ile Leu Lys Pro Gln Leu Glu Arg Arg
180 185 190

Arg Gly Tyr Lys Leu Phe Leu Asp Asp Arg Asp Leu Leu Pro Arg Ala
195 200 205

Glu Pro Ser Ala Asp Leu Leu Val Asn Leu Ser Arg Cys Arg Arg Leu
210 215 220

Ile Val Val Leu Ser Asp Ala Phe Leu Ser Arg Ala Trp Cys Ser His
225 230 235 240

Ser Phe Arg Trp Val Pro Arg Gly Val Gly Trp Ala Pro Ala Tyr Thr
245 250 255

His Pro Pro Asp Gly Pro Ala Pro Gln Gly Gly Pro Val Pro Ala Ala
260 265 270

Gly Ala His Pro Gln Thr His Leu His His Leu Arg Gly Pro Glu Ala
275 280 285

Arg Pro Arg Ala Pro Gly Ala Pro Pro Ala Ala Pro Ala Pro Pro Pro
290 295 300

Gly Asp Leu Ala Ala Leu Glu Ala Arg Leu Arg Asp Ser Phe Leu Arg
305 310 315 320

Phe Leu Glu Arg Ser Ala Ala Gly Ala Ala Ala Glu Gly Ala Val Gln
325 330 335

Ala Gly Gly Arg Arg Pro Pro Asp Ala Ala Ala Gly Arg Gln Gly Pro
340 345 350

His Ala Asp Ser Ser Arg Pro Ser Pro
355 360

<210> 136
<211> 329
<212> PRT
<213> Homo sapien

<400> 136

Met Pro Gly Val Cys Asp Arg Ala Pro Asp Phe Leu Ser Pro Ser Glu
1 5 10 15

166

Asp Gln Val Leu Arg Pro Ala Leu Gly Ser Ser Val Ala Leu Asn Cys
20 25 30

Thr Ala Trp Val Val Ser Gly Pro His Cys Ser Leu Pro Ser Val Gln
35 40 45

Trp Leu Lys Asp Gly Leu Pro Leu Gly Ile Gly Gly His Tyr Ser Leu
50 55 60

His Glu Tyr Ser Trp Val Lys Ala Asn Leu Ser Glu Val Leu Val Ser
65 70 75 80

Ser Val Leu Gly Val Asn Val Thr Ser Thr Glu Val Tyr Gly Ala Phe
85 90 95

Thr Cys Ser Ile Gln Asn Ile Ser Phe Ser Ser Phe Thr Leu Gln Arg
100 105 110

Ala Gly Pro Thr Ser His Val Ala Ala Val Leu Ala Ser Leu Leu Val
115 120 125

Leu Leu Ala Leu Leu Ala Ala Leu Leu Tyr Val Lys Cys Arg Leu
130 135 140

Asn Val Leu Leu Trp Tyr Gln Asp Ala Tyr Gly Glu Val Glu Ile Asn
145 150 155 160

Asp Gly Lys Leu Tyr Asp Ala Tyr Val Ser Tyr Ser Asp Cys Pro Glu
165 170 175

Asp Arg Lys Phe Val Asn Phe Ile Leu Lys Pro Gln Leu Glu Arg Arg
180 185 190

Arg Gly Tyr Lys Leu Phe Leu Asp Asp Arg Asp Leu Leu Pro Arg Ala
195 200 205

Glu Pro Ser Ala Asp Leu Leu Val Asn Leu Ser Arg Cys Arg Arg Leu
210 215 220

Ile Val Val Leu Ser Asp Ala Phe Leu Ser Arg Ala Trp Cys Ser His
225 230 235 240

Ser Phe Arg Trp Val Pro Arg Gly Val Gly Trp Ala Pro Ala Tyr Thr
245 250 255

167

His Pro Pro Asp Gly Pro Ala Pro Gln Gly Gly Pro Val Pro Ala Ala
260 265 270

Gly Ala His Pro Gln Thr His Leu His His Leu Arg Gly Pro Glu Ala
275 280 285

Arg Pro Arg Ala Pro Gly Ala Pro Pro Ala Ala Pro Ala Pro Pro Pro
290 295 300

Gly Asp Leu Ala Ala Leu Glu Ala Arg Leu Arg Gly Ala Glu Gln Ala
305 310 315 320

Arg Glu Gly Pro Gly Leu Ala Ala Gly
325

<210> 137

<211> 164

<212> PRT

<213> Homo sapien

<400> 137

Pro Pro Pro Leu Arg Arg Arg Arg Pro Pro Ser Arg Arg Ala Leu Arg.
1 5 10 15

Arg Pro Leu Gly Glu Pro Glu Pro Leu Pro Thr Pro His Arg Gly Ala
20 25 30

Phe Gly Arg Leu Pro Glu Pro Gly Leu Val Gln Pro Gln Leu Pro Thr
35 40 45

Pro Ser Ser Asp Phe Trp Lys Glu Val Gln Leu Ala Leu Pro Arg Lys
50 55 60

Val Arg Tyr Arg Pro Val Glu Gly Asp Pro Gln Thr Gln Leu Gln Asp
65 70 75 80

Asp Lys Asp Pro Met Leu Ile Leu Arg Gly Arg Val Pro Glu Gly Arg
85 90 95

Ala Leu Asp Ser Glu Val Asp Pro Asp Pro Glu Gly Asp Leu Gly Val
100 105 110

Arg Gly Pro Val Phe Gly Glu Pro Ser Ala Pro Pro His Thr Ser Gly
115 120 125

Val Ser Leu Gly Glu Ser Arg Ser Ser Glu Val Asp Val Ser Asp Leu
130 135 140

168

Gly Ser Arg Asn Tyr Ser Ala Arg Thr Asp Phe Tyr Cys Leu Val Ser
145 150 155 160

Lys Asp Asp Met

<210> 138
<211> 66
<212> PRT
<213> Homo sapien

<400> 138

Met Leu Leu Glu Arg Arg Ser Val Met Asp Arg Gly Arg Gly Glu Glu
1 5 10 15

Trp Arg Ala Arg Ser Glu Ser Ala Gln Ser Lys Met Leu Ser Gly Val
20 25 30

Gly Gly Phe Val Leu Gly Leu Leu Phe Leu Gly Ala Gly Leu Phe Ile
35 40 45

Tyr Phe Arg Asn Gln Lys Gly His Ser Gly Leu Gln Pro Thr Gly Phe
50 55 60

Leu Ser
65

<210> 139
<211> 135
<212> PRT
<213> Homo sapien

<400> 139

Pro His Ser Arg Lys Asn Leu Leu Pro Gln Leu Cys Arg Met Lys Ser
1 5 10 15

Phe Pro Ala Trp Gln Leu Phe Phe His Lys Arg Gly Leu Ser Gln Asp
20 25 30

Leu Val Ala Thr Gly Ser Ala Thr Ala Glu Asn Val Leu Pro Cys Gly
35 40 45

Phe Leu Ser Ser Cys Pro Trp Pro Glu Val Pro Ala Leu Met Ala Ala
50 55 60

Pro His Leu Gln Leu Leu Cys Ser Pro Leu Pro Lys Pro Tyr Gly Leu

169

65

70

75

80

Pro Cys Ile Cys Thr His Pro Val Arg Gln Thr His Tyr Ile Ile Lys
85 90 95

Cys Phe Ser Lys Met Glu Leu Asn Ile Ile Trp Ser Ile Trp Leu Gln
100 105 110

Arg Gln Lys Met Lys Arg Lys Arg Glu Asp Tyr Phe Pro Asn Arg Ile
115 120 125

Met Ile Phe Met Tyr Met Ser
130 135

<210> 140
<211> 115
<212> PRT
<213> Homo sapien

<400> 140

Met Lys Ser Phe Pro Ala Trp Gln Leu Phe Phe His Lys Arg Gly Leu
1 5 10 15

Ser Gln Asp Leu Val Ala Thr Gly Ser Ala Thr Leu Gln Lys Met Ser
20 25 30

Ile Pro Cys Gly Phe Leu Ser Ser Cys Pro Trp Pro Glu Val Pro Ala
35 40 45

Leu Met Ala Ala Pro His Leu Gln Leu Leu Cys Ser Pro Leu Pro Lys
50 55 60

Pro Tyr Gly Leu Pro Cys Ile Cys Thr His Pro Val Arg Gln Thr His
65 70 75 80

Tyr Ile Ile Lys Cys Phe Ser Lys Met Glu Leu Asn Ile Ile Trp Ser
85 90 95

Ile Trp Leu Gln Arg Gln Lys Met Lys Arg Lys Arg Glu Asp Tyr Phe
100 105 110

Pro Ile Glu
115

<210> 141
<211> 135
<212> PRT

170

<213> Homo sapien

<400> 141

Pro His Ser Arg Lys Asn Leu Leu Pro Gln Leu Cys Arg Met Lys Ser
1 5 10 15

Phe Pro Ala Trp Gln Leu Phe Phe His Lys Arg Gly Leu Ser Gln Asp
20 25 30

Leu Val Ala Thr Gly Ser Ala Thr Ala Glu Asn Val Leu Pro Cys Gly
35 40 45

Phe Leu Ser Ser Cys Pro Trp Pro Glu Val Pro Ala Leu Met Ala Ala
50 55 60

Pro His Leu Gln Leu Leu Cys Ser Pro Leu Pro Lys Pro Tyr Gly Leu
65 70 75 80

Pro Cys Ile Cys Thr His Pro Val Arg Gln Thr His Tyr Ile Ile Lys
85 90 95

Cys Phe Ser Lys Met Glu Leu Asn Ile Ile Trp Ser Ile Trp Leu Gln
100 105 110

Arg Gln Lys Met Lys Arg Lys Arg Glu Asp Tyr Phe Pro Asn Arg Ile
115 120 125

Met Ile Phe Met Tyr Met Ser
130 135

<210> 142

<211> 220

<212> PRT

<213> Homo sapien

<400> 142

Met Asp Gln His Phe Arg Thr Thr Pro Leu Glu Lys Asn Ala Pro Val
1 5 10 15

Leu Leu Ala Leu Leu Gly Ile Trp Tyr Ile Asn Cys Phe Gly Cys Glu
20 25 30

Thr His Ala Met Leu Pro Tyr Asp Gln Tyr Leu His Arg Phe Ala Ala
35 40 45

Tyr Phe Gln Gln Gly Asp Met Glu Ser Asn Gly Lys Tyr Ile Thr Lys
50 55 60

171

Ser Gly Thr Arg Val Asp His Gln Thr Gly Pro Ile Val Trp Gly Glu
65 70 75 80

Pro Gly Thr Asn Gly Gln His Ala Phe Tyr Gln Leu Ile His Gln Gly
85 90 95

Thr Lys Met Ile Pro Cys Asp Phe Leu Ile Pro Val Gln Thr Gln His
100 105 110

Pro Ile Arg Lys Gly Leu His His Lys Ile Leu Leu Ala Asn Phe Leu
115 120 125

Ala Gln Thr Glu Ala Leu Met Arg Gly Lys Ser Thr Glu Glu Ala Arg
130 135 140

Lys Glu Leu Gln Ala Ala Gly Lys Ser Pro Glu Asp Leu Glu Arg Leu
145 150 155 160

Leu Pro His Lys Val Phe Glu Gly Asn Arg Pro Thr Asn Ser Ile Val
165 170 175

Phe Thr Lys Leu Thr Pro Phe Met Leu Gly Ala Leu Val Ala Met Tyr
180 185 190

Glu His Lys Ile Phe Val Gln Gly Ile Ile Trp Asp Ile Asn Ser Phe
195 200 205

Asp Gln Trp Gly Ser Gly Ala Gly Lys Ala Ala Gly
210 215 220

<210> 143
<211> 287
<212> PRT
<213> Homo sapien

<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> X=any amino acid

<400> 143

Val Arg Gly Leu Gly Gly Xaa Ala Ile Gly Leu Ser Ile Ala Leu His
1 5 10 15

Val Gly Phe Asp Asn Phe Glu Gln Leu Leu Ser Gly Ala His Trp Met
20 25 30

172

Asp Gln His Phe Arg Thr Thr Pro Leu Glu Lys Asn Ala Pro Val Leu
35 40 45

Leu Ala Leu Leu Gly Ile Trp Tyr Ile Asn Cys Phe Gly Cys Glu Thr
50 55 60

His Ala Met Leu Pro Tyr Asp Gln Tyr Leu His Arg Phe Ala Ala Tyr
65 70 75 80

Phe Gln Gln Gly Asp Met Glu Ser Asn Gly Lys Tyr Ile Thr Lys Ser
85 90 95

Gly Thr Arg Val Asp His Gln Thr Gly Pro Ile Val Trp Gly Glu Pro
100 105 110

Gly Thr Asn Gly Gln His Ala Phe Tyr Gln Leu Ile His Gln Gly Thr
115 120 125

Lys Met Ile Pro Cys Asp Phe Leu Ile Pro Val Gln Thr Gln His Pro
130 135 140

Ile Arg Lys Gly Leu His His Lys Ile Leu Leu Ala Asn Phe Leu Ala
145 150 155 160

Gln Thr Glu Ala Leu Met Arg Gly Lys Ser Thr Glu Glu Ala Arg Lys
165 170 175

Glu Leu Gln Ala Ala Gly Lys Ser Pro Glu Asp Leu Glu Arg Leu Leu
180 185 190

Pro His Lys Val Phe Glu Gly Asn Arg Pro Thr Asn Ser Ile Val Phe
195 200 205

Thr Lys Leu Thr Pro Phe Met Leu Gly Ala Leu Val Ala Met Tyr Glu
210 215 220

His Lys Ile Phe Val Gln Gly Ile Ile Trp Asp Ile Asn Ser Phe Asp
225 230 235 240

Gln Trp Gly Val Glu Leu Gly Lys Gln Leu Ala Lys Lys Ile Glu Pro
245 250 255

Glu Leu Asp Gly Ser Ala Gln Val Thr Ser His Asp Ala Ser Thr Asn
260 265 270

173

Gly Leu Ile Asn Phe Ile Lys Gln Gln Arg Glu Ala Arg Val Gln
275 280 285

<210> 144
<211> 147
<212> PRT
<213> Homo sapien

<400> 144

Met Ala Pro Gly Arg Gly Leu Gly His Ala Trp Leu Val Leu Gln Asn
1 5 10 15

Gly Arg Ala Cys Pro His Arg Pro Ala Arg Leu Ser Leu Trp Gly Arg
20 25 30

Val Cys Phe Pro Ser Arg Gly Leu Gly Ile Arg Thr Leu Leu Glu Thr
35 40 45

Phe Leu Gly Val Phe Cys Arg Tyr Leu Lys Glu Ile Ala Gln Pro Thr
50 55 60

Leu Leu Cys Ser Pro Ser Ser His His Ser Cys Leu Glu Pro Trp Ser
65 70 75 80

Pro Cys Met Ser Thr Arg Ser Ser Phe Arg Ala Ser Ser Gly Thr Ser
85 90 95

Thr Ala Leu Thr Ser Gly Gly Val Glu Leu Gly Lys Gln Leu Ala Lys
100 105 110

Lys Ile Glu Pro Glu Leu Asp Gly Ser Ala Gln Val Thr Ser His Asp
115 120 125

Ala Ser Thr Asn Gly Leu Ile Asn Phe Ile Lys Gln Gln Arg Glu Ala
130 135 140

Arg Val Gln
145

<210> 145
<211> 150
<212> PRT
<213> Homo sapien

<220>
<221> MISC_FEATURE
<222> (9)..(10)
<223> X=any amino acid

174

<400> 145

Ser Gln His Phe Gly Arg Pro Arg Xaa Xaa Asp His Leu Arg Ser Asp
1 5 10 15

Gln Ser Gly Gln His Gly Glu Thr Pro Ser Val Pro Lys Ile Gln Lys
20 25 30

Pro Ala Gly His Gly Gly Thr Cys Leu Trp Ser Gln Leu Leu Gly Arg
35 40 45

Pro Arg Gln Lys Thr Arg Trp Asn Pro Gly Gly Ala Cys Arg Glu
50 55 60

Pro Arg Leu Cys His Cys Thr Ala Ala Trp Val Thr Glu Pro Asp Ser
65 70 75 80

Ile Ser Thr Thr Asp Ala Leu Thr Leu Gly Val Ser Val Ala Gln Gly
85 90 95

Arg Gly Ala His Val Thr Gln Ala Asp Gly Pro Phe Ala Thr Ala Val
100 105 110

Asp Glu His Val Ala Leu Val Arg Val Glu Leu Gly Cys Ser Asp Asp
115 120 125

Phe Gly Gln Leu Leu His Val Ser Arg Leu Asp Val His Asp Val Lys
130 135 140

Ala Ser Ile Cys Asp Phe
145 150

<210> 146
<211> 811
<212> PRT
<213> Homo sapien

<400> 146

Met Thr Asp Ile Leu Phe Leu Pro Met Trp Ile Ser Asn Gln His Thr
1 5 10 15

Pro Ser Ser Pro Gln Gly Asp Gly Gly Ser Ala His Thr Phe Ile Ser
20 25 30

Thr Gly Gly Pro Gly Ile Ser Thr Arg Leu His Leu His Arg Gly Met
35 40 45

175

Gly Asp Gln His Thr Pro Ser Ser Pro Gln Trp Asp Gly Gly Ser Ala
50 55 60

His Ala Phe Ile Ser Thr Gly Gly Trp Gly Met Ser Thr Arg Leu His
65 70 75 80

Leu His Arg Gly Met Ala Asp Gln His Thr Pro Ser Ser Pro Gln Gly
85 90 95

Asp Gly Gly Ser Ala His Ala Phe Ile Ser Thr Gly Gly Arg Gly Ile
100 105 110

Ser Thr Arg Leu His Leu His Arg Arg Thr Gly Asp Gln His Thr Pro
115 120 125

Ser Ser Pro Gln Gly Asp Arg Gly Ser Ala His Thr Phe Ile Ser Thr
130 135 140

Gly Gly Trp Gly Ile Ser Thr His Leu His Leu His Arg Gly Met Gly
145 150 155 160

Asp Gln His Thr Pro Ser Ser Pro Gln Gly Asp Gly Gly Ser Ala His
165 170 175

Ala Phe Ile Ser Thr Gly Gly Trp Gly Ile Ser Thr Arg Leu His Leu
180 185 190

His Ser Gly Met Ala Asp Gln His Thr Pro Ser Ser Pro Gln Gly Asp
195 200 205

Gly Gly Ser Ala His Thr Phe Ile Ser Thr Gly Gly Trp Gly Ile Ser
210 215 220

Thr Arg Leu His Leu His Ser Gly Met Ala Asp Gln His Thr Pro Ser
225 230 235 240

Ser Pro Gln Gly Asp Gly Gly Ser Ala His Ala Phe Ile Ser Thr Val
245 250 255

Gly Arg Gly Ile Ser Thr His Leu His Leu His Arg Gly Thr Gly Asp
260 265 270

Gln His Thr Pro Pro Ser Pro Gln Gly His Glu Glu Ala Ala His Thr
275 280 285

176

Phe Ile Ser Thr Gly Gly Arg Gly Ile Ser Thr His Leu His Leu His
290 295 300

Arg Gly Met Gly Asp Gln His Thr Pro Pro Ser Pro Gln Gly Asp Lys
305 310 315 320

Arg Ser Ala His Thr Phe Ile Pro Thr Gly Gly Gln Gly Ile Ser Ile
325 330 335

Pro Leu His Leu His Arg Gly Met Gly Asp Gln His Thr Pro Ser Ser
340 345 350

Pro Gln Gly Asp Gly Gly Ser Ala Tyr Pro Phe Ile Ser Thr Gly Gly
355 360 365

Trp Gly Ile Ser Thr His Leu His Pro His Arg Gly Met Gly Asp Gln
370 375 380

His Thr Pro Pro Ser Pro Gln Gly His Glu Glu Ser Ala His Thr Phe
385 390 395 400

Ile Ser Thr Gly Arg Arg Gly Ile Ser Thr Pro Leu His Leu His Arg
405 410 415

Gly Met Gly Asp Gln His Thr Pro Ser Ser Pro Gln Gly Asp Gly Gly
420 425 430

Ser Ala Val His Thr Phe Ile Lys Ile Gly Glu Gln Gly Ile Ser Thr
435 440 445

His Leu Tyr Leu His Arg Gly Thr Arg Asp Gln His Thr Pro Pro Ser
450 455 460

Pro Gln Gly Met Gly Asp Gln His Thr Pro Ser Ser Pro Gln Gly Asp
465 470 475 480

Gly Asp Gln His Thr Pro Ser Ser Pro Gln Gly Asp Gly Gly Ser Thr
485 490 495

His Pro Phe Ile Ser Thr Gly Asp Gly Gly Ser Ala His Thr Phe Ile
500 505 510

Ser Thr Gly Gly Arg Gly Ile Ser Thr Arg Leu His Val His Arg Gly
515 520 525

177

Thr Gly Asp Gln His Thr Pro Ser Ser Ser Gln Gly Asp Gly Gly Ser
530 535 540

Ala His Thr Phe Ile Ser Thr Gly Gly Arg Gly Ser Ala His Thr Ile
545 550 555 560

Ser Thr Gly Gly Gln Gly Ile Asn Thr Pro Leu His Leu His Met Gly
565 570 575

Met Gly Asp Gln His Thr Pro Ser Ser Pro Gln Gly Asp Gly Asp Gln
580 585 590

His Thr Pro Pro Ser Pro Gln Gly Arg Gly Gly Leu Ala His Pro Phe
595 600 605

Ile Ser Thr Gly Arg Trp Gly Ile Ser Thr His Leu His Leu His Arg
610 615 620

Gly Thr Gly Asp Gln His Thr Pro Ser Ser Pro Gln Trp Asp Arg Gly
625 630 635 640

Ser Ala Tyr Pro Phe Ile Ser Thr Gly Gly Trp Gly Ser Ala His Thr
645 650 655

Phe Ile Ser Thr Glu Glu Met Gly Asp Gln His Ala Pro Ser Ser Pro
660 665 670

Gln Gly His Gly Ser Ala His Thr Phe Ile Ser Thr Gly Gly Arg
675 680 685

Gly Ile Ser Thr His Leu His Pro Asp Arg Gly Met Arg Asn Gln His
690 695 700

Thr Pro Ser Ser Arg Gln Gly Asp Gly Met Gly Asp Gln His Thr Pro
705 710 715 720

Pro Ser Pro Gln Gly His Glu Gly Ala Ala His Thr Ser Ile Ser Thr
725 730 735

Gly His Arg Gly Ser Ala His Thr Ser Phe Ser Thr Gly Ala Gln Ala
740 745 750

Ile Ser Thr Tyr Leu His Leu Asp Arg Val Thr Gly Asp Gln His Thr
755 760 765

Pro Pro Ser Pro Gln Gln Gln Glu Ser Thr His Thr Phe Ile Ser

178

770 775 780

Thr Gly Gly Arg Gly Ile Ser Thr His Leu His Leu His Arg Gly Thr
785 790 795 800

Gly Ala Arg Leu Pro Thr Pro Leu Gly Asp Thr
805 810

<210> 147
<211> 442
<212> PRT
<213> Homo sapien

<400> 147

Phe Arg Val Met Thr Asp Ile Leu Phe Leu Pro Met Trp Ile Ser Asn
1 5 10 15

Gln His Thr Pro Ser Ser Pro Gln Gly Asp Gly Gly Ser Ala His Thr
20 25 30

Phe Ile Ser Thr Gly Gly Pro Gly Ile Ser Thr Arg Leu His Leu His
35 40 45

Arg Gly Met Gly Asp Gln His Thr Pro Ser Ser Pro Gln Trp Asp Gly
50 55 60

Gly Ser Ala His Ala Phe Ile Ser Thr Gly Gly Trp Gly Met Ser Thr
65 70 75 80

Arg Leu His Leu His Arg Gly Met Ala Asp Gln His Thr Pro Ser Ser
85 90 95

Pro Gln Gly Asp Gly Gly Ser Ala His Ala Phe Ile Ser Thr Gly Gly
100 105 110

Arg Gly Ile Ser Thr Arg Leu His Leu His Arg Arg Thr Gly Asp Gln
115 120 125

His Thr Pro Ser Ser Pro Gln Gly Asp Arg Gly Ser Ala His Thr Phe
130 135 140

Ile Ser Thr Gly Gly Trp Gly Ile Ser Thr His Leu His Leu His Arg
145 150 155 160

Gly Met Gly Asp Gln His Thr Pro Ser Ser Pro Gln Gly Asp Gly Gly
165 170 175

179

Ser Ala His Ala Phe Ile Ser Thr Gly Gly Trp Gly Ile Ser Thr Arg
180 185 190

Leu His Leu His Ser Gly Met Ala Asp Gln His Thr Pro Ser Ser Pro
195 200 205

Gln Gly Asp Gly Gly Ser Ala His Thr Phe Ile Ser Thr Gly Gly Trp
210 215 220

Gly Ile Ser Thr Arg Leu His Leu His Ser Gly Met Ala Asp Gln His
225 230 235 240

Thr Pro Ser Ser Pro Gln Gly Asp Gly Gly Ser Ala His Ala Phe Ile
245 250 255

Ser Thr Val Gly Arg Gly Ile Ser Thr His Leu His Leu His Arg Gly
260 265 270

Thr Gly Asp Gln His Thr Pro Pro Ser Pro Gln Gly His Glu Glu Ala
275 280 285

Ala His Thr Phe Ile Ser Thr Gly Gly Arg Gly Ile Ser Thr His Leu
290 295 300

His Leu His Arg Gly Met Gly Asp Gln His Thr Pro Pro Ser Pro Gln
305 310 315 320

Gly Asp Lys Arg Ser Ala His Thr Phe Ile Pro Thr Gly Gly Gln Gly
325 330 335

Ile Ser Ile Pro Leu His Leu His Arg Gly Met Gly Asp Gln His Thr
340 345 350

Pro Ser Ser Pro Gln Gly Asp Gly Gly Ser Ala Tyr Pro Phe Ile Ser
355 360 365

Thr Gly Gly Trp Gly Ile Ser Thr His Leu His Pro His Arg Gly Met
370 375 380

Gly Asp Gln His Thr Pro Pro Ser Pro Gln Gly His Glu Glu Ser Ala
385 390 395 400

His Thr Phe Ile Ser Thr Gly Arg Arg Gly Ile Ser Thr Pro Leu His
405 410 415

180

Leu His Arg Gly Met Gly Asp Gln His Thr Pro Ser Ser Pro Gln Gly
420 425 430

Asp Gly Gly Ser Ala Val His Thr Phe Ile
435 440

<210> 148

<211> 351

<212> PRT

<213> Homo sapien

<400> 148

Met Lys Ala Ser Gly Thr Leu Arg Glu Tyr Lys Val Val Gly Arg Cys
1 5 10 15

Leu Pro Thr Pro Lys Cys His Thr Pro Pro Leu Tyr Arg Met Arg Ile
20 25 30

Phe Ala Pro Asn His Val Val Ala Lys Ser Arg Phe Trp Tyr Phe Val
35 40 45

Ser Gln Leu Lys Lys Met Lys Lys Ser Ser Gly Glu Ile Val Tyr Cys
50 55 60

Gly Gln Val Phe Glu Lys Ser Pro Leu Arg Val Lys Asn Phe Gly Ile
65 70 75 80

Trp Leu Arg Tyr Asp Ser Arg Ser Gly Thr His Asn Met Tyr Arg Glu
85 90 95

Tyr Arg Asp Leu Thr Thr Ala Gly Ala Val Thr Gln Cys Tyr Arg Asp
100 105 110

Met Gly Ala Arg His Arg Ala Arg Ala His Ser Ile Gln Ile Met Lys
115 120 125

Val Glu Glu Ile Ala Ala Ser Lys Cys Arg Arg Pro Ala Val Lys Gln
130 135 140

Phe His Asp Ser Lys Ile Lys Phe Pro Leu Pro His Arg Val Leu Arg
145 150 155 160

Arg Gln His Lys Pro Arg Phe Thr Thr Lys Arg Pro Asn Asn Leu Leu
165 170 175

Ser Arg Cys Arg Ala Leu Val Arg Gly Val Pro Pro Asn Lys Leu Arg
180 185 190

Asn Ala Pro Lys Val Gln Ala Ala Val Pro Asp Asp Phe Lys Asp Phe
195 200 205

Ser Leu Leu Asn Glu Glu Ala Arg Tyr Tyr Gln Phe Lys Thr Met Val
210 215 220

Arg Arg Ala Trp Ser Ala Gly Thr His Asp Pro Glu Lys Ser Thr Gly
225 230 235 240

Asn Arg Asp Gly Glu Arg Leu Asp Ala Lys Ser Ser Ala Arg Arg Trp
245 250 255

Ala Lys Arg Asp Arg Thr Thr Arg Arg Ala Leu Pro Ala Glu Glu Glu
260 265 270

Tyr His Ser Asn Ala Lys Ala Thr Val Arg Gln Asn Lys Pro Arg Arg
275 280 285

His Gln Ser Gly Ala Lys Glu Lys Lys Gln His Asn Glu His Ala Ala
290 295 300

Ala Gln Tyr Ala Ala Arg Ser Lys Glu Thr Asp Arg Lys Gln Pro Val
305 310 315 320

Gly Asp Asn Gln Gly Glu Thr Lys Pro Pro Gly Arg Lys Arg Glu Gly
325 330 335

Glu Glu Arg Thr Ala Gly Pro Asn Lys Glu Arg Asn Ser Arg His
340 345 350

<210> 149
<211> 223
<212> PRT
<213> Homo sapien

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> X=any amino acid

<400> 149

Ala Phe Ala Xaa Gly Gly Glu Arg Gly Glu His Ala Met Lys Ala Ser
1 5 10 15

Gly Thr Leu Arg Glu Tyr Lys Val Val Gly Arg Cys Leu Pro Thr Pro
20 25 30

182

Lys Cys His Thr Pro Pro Leu Tyr Arg Met Arg Ile Phe Ala Pro Asn
35 40 45

His Val Val Ala Lys Ser Arg Phe Trp Tyr Phe Val Ser Gln Leu Lys
50 55 60

Lys Met Lys Lys Ser Ser Gly Glu Ile Val Tyr Cys Gly Gln Val Phe
65 70 75 80

Glu Lys Ser Pro Leu Arg Val Lys Asn Phe Gly Ile Trp Leu Arg Tyr
85 90 95

Asp Ser Arg Ser Gly Thr His Asn Met Tyr Arg Glu Tyr Arg Asp Leu
100 105 110

Thr Thr Ala Gly Ala Val Thr Gln Cys Tyr Arg Asp Met Gly Ala Arg
115 120 125

His Arg Ala Arg Ala His Ser Ile Gln Ile Met Lys Val Glu Glu Ile
130 135 140

Ala Ala Ser Lys Cys Arg Arg Pro Ala Val Lys Gln Phe His Asp Ser
145 150 155 160

Lys Ile Lys Phe Pro Leu Pro His Arg Val Leu Arg Arg Gln His Lys
165 170 175

Pro Arg Phe Thr Thr Lys Arg Pro Asn Asn Leu Leu Ser Arg Cys Arg
180 185 190

Ala Leu Val Arg Gly Val Pro Pro Asn Lys Leu Arg Asn Ala Pro Lys
195 200 205

Val Gln Ala Ala Val Pro Asp Asp Phe Lys Asp Phe Ser Leu Leu
210 215 220

<210> 150

<211> 260

<212> PRT

<213> Homo sapien

<400> 150

Thr Ala Val Leu Ser Pro Gly Pro Arg Leu Pro Ser His Ser Ala Arg
1 5 10 15

183

Cys Ala Cys Glu Gly Leu Ala Ala Leu Gly Thr Gly Gly Ala Ala Arg
20 25 30

Gly Val Arg Val Gly Val Arg Glu Gly Ser Thr Gln Asp Leu Arg Thr
35 40 45

Leu Leu Trp Gly Arg Thr Lys His Leu Pro Gly Ala Gly Gly Ala Pro
50 55 60

Gly Thr Arg Arg Phe Arg Gln Leu Gly Ala Leu Gly Ile Cys Gly Leu
65 70 75 80

Arg Pro Gly Asp Gly Leu Gly Gly His Ala His Ala Leu Gly Leu Thr
85 90 95

Glu Cys Asp Arg Ala Arg Gly Arg Ala Lys Arg Gly Gly Arg Ala Arg
100 105 110

Arg Arg Lys Glu Gly Leu Val Arg Pro Ala Gln Pro Asp Gln Cys Arg
115 120 125

Gly Gly Asn Gly Leu Gly Ala Gly Pro Ile Arg Ala Gly Gly Phe Leu
130 135 140

Arg Arg Arg Pro Ser Pro Gln Leu Leu Asp Cys Ser Gly Ala Gly Gly
145 150 155 160

Thr Asn Thr Trp Arg Phe Phe Arg Arg Gly Glu Asp Phe Leu Arg Ala
165 170 175

Gln Arg Ile His Phe Leu His Ile Asn Leu Ser Cys Trp Arg Asp Thr
180 185 190

Ala Gly Lys Arg Arg Pro Ile Phe Val Gln Arg Thr Leu Asp Leu Gly
195 200 205

Arg Asn Lys Asp Asp Leu Asp Pro Cys Pro His Tyr Leu Glu Phe Ser
210 215 220

Met Leu Ala Lys Ile Trp Thr Arg Ala Val Pro Glu Gly Arg Gly Pro
225 230 235 240

Trp Arg Glu Ala Pro Val Thr Ala His Pro Gly Val Gly Leu Trp Ala
245 250 255

Leu Leu Leu Cys

184

260

<210> 151
<211> 259
<212> PRT
<213> Homo sapien

<400> 151

Ser Arg Val Val Ala Arg Pro Arg Leu Pro Ser His Ser Ala Arg Cys
1 5 10 15

Ala Cys Glu Gly Leu Ala Ala Leu Gly Thr Gly Gly Ala Ala Arg Gly
20 25 30

Val Arg Val Gly Val Arg Glu Gly Ser Thr Gln Asp Leu Arg Thr Leu
35 40 45

Leu Trp Gly Arg Thr Lys His Leu Pro Gly Ala Gly Gly Ala Pro Gly
50 55 60

Thr Arg Arg Phe Arg Gln Leu Gly Ala Leu Gly Ile Cys Gly Leu Arg
65 70 75 80

Pro Gly Asp Gly Leu Gly Gly His Ala His Ala Leu Gly Leu Thr Glu
85 90 95

Cys Asp Arg Ala Arg Gly Arg Ala Lys Arg Gly Gly Arg Ala Arg Arg
100 105 110

Arg Lys Glu Gly Leu Val Arg Pro Ala Gln Pro Asp Gln Cys Arg Gly
115 120 125

Gly Asn Gly Leu Gly Ala Gly Pro Ile Arg Ala Gly Gly Phe Leu Arg
130 135 140

Arg Arg Pro Ser Pro Gln Leu Leu Asp Cys Ser Gly Ala Gly Gly Thr
145 150 155 160

Asn Thr Trp Arg Phe Phe Arg Arg Gly Glu Asp Phe Leu Arg Ala Gln
165 170 175

Arg Ile His Phe Leu His Ile Asn Leu Ser Cys Trp Arg Asp Thr Ala
180 185 190

Gly Lys Arg Arg Pro Ile Phe Val Gln Arg Thr Leu Asp Leu Gly Arg
195 200 205

Asn Lys Asp Asp Leu Asp Pro Cys Pro His Tyr Leu Glu Phe Ser Met
210 215 220

Leu Ala Lys Ile Trp Thr Arg Ala Val Pro Glu Gly Arg Gly Pro Trp
225 230 235 240

Arg Glu Ala Pro Val Thr Ala His Pro Gly Val Gly Leu Trp Ala Leu
245 250 255

Leu Leu Cys

<210> 152
<211> 650
<212> PRT
<213> Homo sapien

<400> 152

Met Gln Gln Asp Gly Leu Gly Val Gly Thr Arg Asn Gly Ser Gly Lys
1 5 10 15

Gly Arg Ser Val His Pro Ser Trp Pro Trp Cys Ala Pro Arg Pro Leu
20 25 30

Arg Tyr Phe Gly Arg Asp Ala Arg Ala Arg Arg Ala Gln Thr Ala Ala
35 40 45

Met Ala Leu Leu Ala Gly Gly Leu Ser Arg Gly Leu Gly Ser His Pro
50 55 60

Ala Ala Ala Gly Arg Asp Ala Val Val Phe Val Trp Leu Leu Leu Ser
65 70 75 80

Thr Trp Cys Thr Ala Pro Ala Arg Ala Ile Gln Val Thr Val Ser Asn
85 90 95

Pro Tyr His Val Val Ile Leu Phe Gln Pro Val Thr Leu Pro Cys Thr
100 105 110

Tyr Gln Met Thr Ser Thr Pro Thr Gln Pro Ile Val Ile Trp Lys Tyr
115 120 125

Lys Ser Phe Cys Arg Asp Arg Ile Ala Asp Ala Phe Ser Pro Ala Ser
130 135 140

Val Asp Asn Gln Leu Asn Ala Gln Leu Ala Gly Asn Pro Gly Tyr

186

145	150	155	160
Asn Pro Tyr Val Glu Cys Gln Asp Ser Val Arg Thr Val Arg Val Val			
165		170	175
Ala Thr Lys Gln Gly Asn Ala Val Thr Leu Gly Asp Tyr Tyr Gln Gly			
180	185	.	190
Arg Arg Ile Thr Ile Thr Gly Asn Ala Asp Leu Thr Phe Asp Gln Thr			
195	200		205
Ala Trp Gly Asp Ser Gly Val Tyr Tyr Cys Ser Val Val Ser Ala Gln			
210	215	220	
Asp Leu Gln Gly Asn Asn Glu Ala Tyr Ala Glu Leu Ile Val Leu Gly			
225	230	235	240
Arg Thr Ser Gly Val Ala Glu Leu Leu Pro Gly Phe Gln Ala Gly Pro			
245	250		255
Ile Glu Asp Trp Leu Phe Val Val Val Val Cys Leu Ala Ala Phe Leu			
260	265		270
Ile Phe Leu Leu Leu Gly Ile Cys Trp Cys Gln Cys Cys Pro His Thr			
275	280		285
Cys Cys Cys Tyr Val Arg Cys Pro Cys Cys Pro Asp Lys Cys Cys Cys			
290	295	300	
Pro Glu Ala Leu Tyr Ala Ala Gly Lys Ala Ala Thr Ser Gly Val Pro			
305	310	315	320
Ser Ile Tyr Ala Pro Ser Thr Tyr Ala His Leu Ser Pro Ala Lys Thr			
325	330		335
Pro Pro Pro Pro Ala Met Ile Pro Met Gly Pro Ala Tyr Asn Gly Tyr			
340	345		350
Pro Gly Gly Tyr Pro Gly Asp Val Asp Arg Ser Ser Ser Ala Gly Gly			
355	360	365	
Gln Gly Ser Tyr Val Pro Leu Leu Arg Asp Thr Asp Ser Ser Val Ala			
370	375	380	
Ser Glu Val Arg Ser Gly Tyr Arg Ile Gln Ala Ser Gln Gln Asp Asp			
385	390	395	400

Ser Met Arg Val Leu Tyr Tyr Met Glu Lys Glu Leu Ala Asn Phe Asp
405 410 415

Pro Ser Arg Pro Gly Pro Pro Ser Gly Arg Val Glu Arg Ala Met Ser
420 425 430

Glu Val Thr Ser Leu His Glu Asp Asp Trp Arg Ser Arg Pro Ser Arg
435 440 445

Gly Pro Ala Leu Thr Pro Ile Arg Asp Glu Glu Trp Gly Gly His Ser
450 455 460

Pro Arg Ser Pro Arg Gly Trp Asp Gln Glu Pro Ala Arg Glu Gln Ala
465 470 475 480

Gly Gly Gly Trp Arg Ala Arg Arg Pro Arg Ala Arg Ser Val Asp Ala
485 490 495

Leu Asp Asp Leu Thr Pro Pro Ser Thr Ala Glu Ser Gly Ser Arg Ser
500 505 510

Pro Thr Ser Asn Gly Gly Arg Arg Ser Arg Ala Tyr Met Pro Pro Arg
515 520 525

Ser Arg Ser Arg Asp Asp Leu Tyr Asp Gln Asp Asp Ser Arg Asp Phe
530 535 540

Pro Arg Ser Arg Asp Pro His Tyr Asp Asp Phe Arg Ser Arg Glu Arg
545 550 555 560

Pro Pro Ala Asp Pro Arg Ser His His Arg Thr Arg Asp Pro Arg
565 570 575

Asp Asn Gly Ser Arg Ser Gly Asp Leu Pro Tyr Asp Gly Arg Leu Leu
580 585 590

Glu Glu Ala Val Arg Lys Lys Gly Ser Glu Glu Arg Arg Arg Pro His
595 600 605

Lys Glu Glu Glu Glu Ala Tyr Tyr Pro Pro Ala Pro Pro Pro Tyr
610 615 620

Ser Glu Thr Asp Ser Gln Ala Ser Arg Glu Arg Arg Leu Lys Lys Asn
625 630 635 640

188

Leu Ala Leu Ser Arg Glu Ser Leu Val Val
645 650

<210> 153
<211> 388
<212> PRT
<213> Homo sapien

<400> 153

Met Ser Lys Glu Ala Leu Gln Arg Arg Gly Arg Leu Gly Lys Glu Val
1 5 10 15

Gln Ala Gln Val Pro Pro Glu Pro Asn Gly Tyr Gly Ala Ala Trp Leu
20 25 30

Leu Pro His Pro Pro Ser Pro Val Asp Cys Val Leu Thr Val Tyr Ala
35 40 45

Ala Gly Lys Ala Ala Thr Ser Gly Val Pro Ser Ile Tyr Ala Pro Ser
50 55 60

Thr Tyr Ala His Leu Ser Pro Ala Lys Thr Pro Pro Pro Pro Ala Met
65 70 75 80

Ile Pro Met Gly Pro Ala Tyr Asn Gly Tyr Pro Gly Gly Tyr Pro Gly
85 90 95

Asp Val Asp Arg Ser Ser Ser Ala Gly Gly Gln Gly Ser Tyr Val Pro
100 105 110

Leu Leu Arg Asp Thr Asp Ser Ser Val Ala Ser Glu Val Arg Ser Gly
115 120 125

Tyr Arg Ile Gln Ala Ser Gln Gln Asp Asp Ser Met Arg Val Leu Tyr
130 135 140

Tyr Met Glu Lys Glu Leu Ala Asn Phe Asp Pro Ser Arg Pro Gly Pro
145 150 155 160

Pro Ser Gly Arg Val Glu Arg Ala Met Ser Glu Val Thr Ser Leu His
165 170 175

Glu Asp Asp Trp Arg Ser Arg Pro Ser Arg Gly Pro Ala Leu Thr Pro
180 185 190

Ile Arg Asp Glu Glu Trp Gly Gly His Ser Pro Arg Ser Pro Arg Gly

189

195

200

205

Trp Asp Gln Glu Pro Ala Arg Glu Gln Ala Gly Gly Gly Trp Arg Ala
210 215 220

Arg Arg Pro Arg Ala Arg Ser Val Asp Ala Leu Asp Asp Leu Thr Pro
225 230 235 240

Pro Ser Thr Ala Glu Ser Gly Ser Arg Ser Pro Thr Ser Asn Gly Gly
245 250 255

Arg Arg Ser Arg Ala Tyr Met Pro Pro Arg Ser Arg Ser Arg Asp Asp
260 265 270

Leu Tyr Asp Gln Asp Asp Ser Arg Asp Phe Pro Arg Ser Arg Asp Pro
275 280 285

His Tyr Asp Asp Phe Arg Ser Arg Glu Arg Pro Pro Ala Asp Pro Arg
290 295 300

Ser His His His Arg Thr Arg Asp Pro Arg Asp Asn Gly Ser Arg Ser
305 310 315 320

Gly Asp Leu Pro Tyr Asp Gly Arg Leu Leu Glu Glu Ala Val Arg Lys
325 330 335

Lys Gly Ser Glu Glu Arg Arg Pro His Lys Glu Glu Glu Glu Glu
340 345 350

Ala Tyr Tyr Pro Pro Ala Pro Pro Pro Tyr Ser Glu Thr Asp Ser Gln
355 360 365

Ala Ser Arg Glu Arg Arg Leu Lys Lys Asn Leu Ala Leu Ser Arg Glu
370 375 380

Ser Leu Val Val
385

<210> 154
<211> 83
<212> PRT
<213> Homo sapien

<400> 154

Met Lys Pro Gly Glu Gly Gly Gln Val Ala Pro Ser Leu Pro Gly Ser
1 5 10 15

190

Gly Gln Thr Cys Leu Glu Ser Gln Gly Arg Thr Arg Ser Ser Asn Pro
20 25 30

Pro Thr Ala Pro Ser Arg Leu Pro Ala Arg Pro Thr Ser His Ser Leu
35 40 45

Gly Ser His Gly Ala Asp Arg Pro Arg Arg Glu His Thr Pro Pro Val
50 55 60

Cys Ala Leu Ser Arg Ser Gln Arg Pro Arg Gly His Arg Ala Met His
65 70 75 80

Ala Pro Asn

<210> 155

<211> 379

<212> PRT

<213> Homo sapien

<400> 155

Ala Ser His Leu Leu Pro Gln Ala Pro Thr Ala Ser Pro Cys Val Leu
1 5 10 15

Gln Glu Thr Tyr Lys Leu Pro His Arg Leu Ile Glu Lys Lys Arg Arg
20 25 30

Asp Arg Ile Asn Glu Cys Ile Ala Gln Leu Lys Asp Leu Leu Pro Glu
35 40 45

His Leu Lys Leu Thr Thr Leu Gly His Leu Glu Lys Ala Val Val Leu
50 55 60

Glu Leu Thr Leu Lys His Val Lys Ala Leu Thr Asn Leu Ile Asp Gln
65 70 75 80

Gln Gln Gln Lys Ile Ile Ala Leu Gln Ser Gly Leu Gln Ala Gly Glu
85 90 95

Leu Ser Gly Arg Asn Val Glu Thr Gly Gln Glu Met Phe Cys Ser Gly
100 105 110

Phe Gln Thr Cys Ala Arg Glu Val Leu Gln Tyr Leu Ala Lys His Glu
115 120 125

Asn Thr Arg Asp Leu Lys Ser Ser Gln Leu Val Thr His Leu His Arg

191

130 135 140

Val Val Ser Glu Leu Leu Gln Gly Gly Thr Ser Arg Lys Pro Ser Asp
145 150 155 160

Pro Ala Pro Lys Val Met Asp Phe Lys Glu Lys Pro Ser Ser Pro Ala
165 170 175

Lys Gly Ser Glu Gly Pro Gly Lys Asn Cys Val Pro Val Ile Gln Arg
180 185 190

Thr Phe Ala His Ser Ser Gly Glu Gln Ser Gly Ser Asp Thr Asp Thr
195 200 205

Asp Ser Gly Tyr Gly Gly Glu Ser Glu Lys Gly Asp Leu Arg Ser Glu
210 215 220

Gln Pro Cys Phe Lys Ser Asp His Gly Arg Arg Phe Thr Met Gly Glu
225 230 235 240

Arg Ile Gly Ala Ile Lys Gln Glu Ser Glu Glu Pro Pro Thr Lys Lys
245 250 255

Asn Arg Met Gln Leu Ser Asp Asp Glu Gly His Phe Thr Ser Ser Asp
260 265 270

Leu Ile Ser Ser Pro Phe Leu Gly Pro His Pro His Gln Pro Pro Phe
275 280 285

Cys Leu Pro Phe Tyr Leu Ile Pro Pro Ser Ala Thr Ala Tyr Leu Pro
290 295 300

Met Leu Glu Lys Cys Trp Tyr Pro Thr Ser Val Pro Val Leu Tyr Pro
305 310 315 320

Gly Leu Asn Ala Ser Ala Ala Leu Ser Ser Phe Met Asn Pro Asp
325 330 335

Lys Ile Ser Ala Pro Leu Leu Met Pro Gln Arg Leu Pro Ser Pro Leu
340 345 350

Pro Ala His Pro Ser Val Asp Ser Ser Val Leu Leu Gln Ala Leu Lys
355 360 365

Pro Ile Pro Pro Leu Asn Leu Glu Thr Lys Asp
370 375

192

<210> 156
<211> 379
<212> PRT
<213> Homo sapien

<400> 156

Ala Ser His Leu Leu Pro Gln Ala Pro Thr Ala Ser Pro Cys Val Leu
1 5 10 15

Gln Glu Thr Tyr Lys Leu Pro His Arg Leu Ile Glu Lys Lys Arg Arg
20 25 30

Asp Arg Ile Asn Glu Cys Ile Ala Gln Leu Lys Asp Leu Leu Pro Glu
35 40 45

His Leu Lys Leu Thr Thr Leu Gly His Leu Glu Lys Ala Val Val Leu
50 55 60

Glu Leu Thr Leu Lys His Val Lys Ala Leu Thr Asn Leu Ile Asp Gln
65 70 75 80

Gln Gln Gln Lys Ile Ile Ala Leu Gln Ser Gly Leu Gln Ala Gly Glu
85 90 95

Leu Ser Gly Arg Asn Val Glu Thr Gly Gln Glu Met Phe Cys Ser Gly
100 105 110

Phe Gln Thr Cys Ala Arg Glu Val Leu Gln Tyr Leu Ala Lys His Glu
115 120 125

Asn Thr Arg Asp Leu Lys Ser Ser Gln Leu Val Thr His Leu His Arg
130 135 140

Val Val Ser Glu Leu Leu Gln Gly Gly Thr Ser Arg Lys Pro Ser Asp
145 150 155 160

Pro Ala Pro Lys Val Met Asp Phe Lys Glu Lys Pro Ser Ser Pro Ala
165 170 175

Lys Gly Ser Glu Gly Pro Gly Lys Asn Cys Val Pro Val Ile Gln Arg
180 185 190

Thr Phe Ala His Ser Ser Gly Glu Gln Ser Gly Ser Asp Thr Asp Thr
195 200 205

193

Asp Ser Gly Tyr Gly Gly Glu Ser Glu Lys Gly Asp Leu Arg Ser Glu
210 215 220

Gln Pro Cys Phe Lys Ser Asp His Gly Arg Arg Phe Thr Met Gly Glu
225 230 235 240

Arg Ile Gly Ala Ile Lys Gln Glu Ser Glu Glu Pro Pro Thr Lys Lys
245 250 255

Asn Arg Met Gln Leu Ser Asp Asp Glu Gly His Phe Thr Ser Ser Asp
260 265 270

Leu Ile Ser Ser Pro Phe Leu Gly Pro His Pro His Gln Pro Pro Phe
275 280 285

Cys Leu Pro Phe Tyr Leu Ile Pro Pro Ser Ala Thr Ala Tyr Leu Pro
290 295 300

Met Leu Glu Lys Cys Trp Tyr Pro Thr Ser Val Pro Val Leu Tyr Pro
305 310 315 320

Gly Leu Asn Ala Ser Ala Ala Leu Ser Ser Phe Met Asn Pro Asp
325 330 335

Lys Ile Ser Ala Pro Leu Leu Met Pro Gln Arg Leu Pro Ser Pro Leu
340 345 350

Pro Ala His Pro Ser Val Asp Ser Ser Val Leu Leu Gln Ala Leu Lys
355 360 365

Pro Ile Pro Pro Leu Asn Leu Glu Thr Lys Asp
370 375

<210> 157
<211> 358
<212> PRT
<213> Homo sapien

<400> 157

Met Lys Pro Gly Glu Gly Gly Gln Val Ala Pro Ser Leu Pro Gly Ser
1 5 10 15

Gly Gln Thr Cys Leu Glu Ser Gln Gly Arg Thr Arg Ser Ser Asn Pro
20 25 . 30

Pro Thr Ala Pro Ser Arg Leu Pro Ala Leu Pro His Phe Ser Phe Thr
35 40 45

Trp Leu Ala Arg Arg Arg Gln Thr Ala Gln Gly Ala His Thr Ala Ser
50 55 60

Leu Cys Ala Glu Ser Glu Pro Glu Ala Ala Gly Thr Pro Gly His Ala
65 70 75 80

Arg Pro Gln Leu Lys Leu His Leu Lys Ala Glu Asp Ser Ser Ser Pro
85 90 95

Gly Asp Phe Lys Glu Leu Arg Leu Arg Gly Thr Ser Ala Glu Arg Pro
100 105 110

Pro Lys Pro Ser Pro Gly Gln Ser Ser Ser Arg Arg Ser Ala Ser Ala
115 120 125

Asp Arg Ser Ala Gln Trp Pro Arg Leu Ala Ala Pro Trp Ser Gly Ser
130 135 140

Pro Ala Arg Asn His Pro Pro Pro Ala Cys Pro Lys His Arg Asp Trp
145 150 155 160

Ser Thr Glu Thr Tyr Gln Gly Lys Leu Ala Leu Leu Gly Pro Ser Ser
165 170 175

Leu Asn Cys Ser Pro Met Leu Cys Ala Thr Leu Asn Leu Glu Gln Leu
180 185 190

Arg Ala His Arg Glu Val Leu Ala Arg Gln Asn Ala Cys Ser Arg Ala
195 200 205

Gln Ala Val Thr Thr Leu Pro Gly Leu Ser Ser Cys Arg Met Tyr Pro
210 215 220

Ala His Met Tyr Gln Val Tyr Lys Ser Arg Arg Gly Ile Lys Arg Ser
225 230 235 240

Glu Asp Ser Lys Val Ser Lys Cys Thr Pro Arg Asp Pro Ala Leu Ser
245 250 255

Pro Ser Arg Ala Leu Ser Phe Gln Glu Lys Phe Ser Arg Phe Glu Val
260 265 270

Gly Glu Gly Met Gln Gly Val Gly Ser Val Pro Leu Leu Ser Asp Leu
275 280 285

195

Glu Lys Lys Gly Gln Thr Met Val Leu Gly Ala Thr Leu Leu Leu Cys
290 295 300

Ser Ser Ala Gly Leu Leu Leu Arg Gly Trp Glu Asp Arg Leu Leu Ile
305 310 315 320

Ser Phe Pro Lys Arg Pro Pro Pro Pro Arg Ala Ser Cys Arg Arg Pro
325 330 335

Thr Asn Cys Arg Thr Gly Ser Ser Arg Lys Arg Asp Val Thr Gly Leu
340 345 350

Thr Ser Ala Ser Pro Ser
355

<210> 158

<211> 329

<212> PRT

<213> Homo sapien

<400> 158

Leu Gln Pro Thr His Arg Ser Leu Pro Pro Pro Arg Pro Pro His Phe
1 5 10 15

Ser Phe Thr Trp Leu Ala Arg Arg Gln Thr Ala Gln Gly Ala His
20 25 30

Thr Ala Ser Leu Cys Ala Glu Ser Glu Pro Glu Ala Ala Gly Thr Pro
35 40 45

Gly His Ala Arg Pro Gln Leu Lys Leu His Leu Lys Ala Glu Asp Ser
50 55 60

Ser Ser Pro Gly Asp Phe Lys Glu Leu Arg Leu Arg Gly Thr Ser Ala
65 70 75 80

Glu Arg Pro Pro Lys Pro Ser Pro Gly Gln Ser Ser Arg Arg Ser
85 90 95

Ala Ser Ala Asp Arg Ser Ala Gln Trp Pro Arg Leu Ala Ala Pro Trp
100 105 110

Ser Gly Ser Pro Ala Arg Asn His Pro Pro Pro Ala Cys Pro Lys His
115 120 125

Arg Asp Trp Ser Thr Glu Thr Tyr Gln Gly Lys Leu Ala Leu Leu Gly

196

130

135

140

Pro Ser Ser Leu Asn Cys Ser Pro Met Leu Cys Ala Thr Leu Asn Leu
145 150 155 160

Glu Gln Leu Arg Ala His Arg Glu Val Leu Ala Arg Gln Asn Ala Cys
165 170 175

Ser Arg Ala Gln Ala Val Thr Thr Leu Pro Gly Leu Ser Ser Cys Arg
180 185 190

Met Tyr Pro Ala His Met Tyr Gln Val Tyr Lys Ser Arg Arg Gly Ile
195 200 205

Lys Arg Ser Glu Asp Ser Lys Val Ser Lys Cys Thr Pro Arg Asp Pro
210 215 220

Ala Leu Ser Pro Ser Arg Ala Leu Ser Phe Gln Glu Lys Phe Ser Arg
225 230 235 240

Phe Glu Val Gly Glu Gly Met Gln Gly Val Gly Ser Val Pro Leu Leu
245 250 255

Ser Asp Leu Glu Lys Lys Gly Gln Thr Met Val Leu Gly Ala Thr Leu
260 265 270

Leu Leu Cys Ser Ser Ala Gly Leu Leu Leu Arg Gly Trp Glu Asp Arg
275 280 285

Leu Leu Ile Ser Phe Pro Lys Arg Pro Pro Pro Pro Arg Ala Ser Cys
290 295 300

Arg Arg Pro Thr Asn Cys Arg Thr Gly Ser Ser Arg Lys Arg Asp Val
305 310 315 320

Thr Gly Leu Thr Ser Ala Ser Pro Ser
325

<210> 159

<211> 425

<212> PRT

<213> Homo sapien

<400> 159

Cys Arg Gln Glu Arg Ala Val Ala Pro Ala Arg Arg Ala Met Glu Arg
1 5 10 15

197

Ile Pro Ser Ala Gln Pro Pro Pro Ala Cys Leu Pro Lys Ala Pro Gly
20 25 30

Leu Glu His Gly Asp Leu Pro Gly Met Tyr Pro Ala His Met Tyr Gln
35 40 45

Val Tyr Lys Ser Arg Arg Gly Ile Lys Arg Ser Glu Asp Ser Lys Glu
50 55 60

Thr Tyr Lys Leu Pro His Arg Leu Ile Glu Lys Lys Arg Arg Asp Arg
65 70 75 80

Ile Asn Glu Cys Ile Ala Gln Leu Lys Asp Leu Leu Pro Glu His Leu
85 90 95

Lys Leu Thr Thr Leu Gly His Leu Glu Lys Ala Val Val Leu Glu Leu
100 105 110

Thr Leu Lys His Val Lys Ala Leu Thr Asn Leu Ile Asp Gln Gln Gln
115 120 125

Gln Lys Ile Ile Ala Leu Gln Ser Gly Leu Gln Ala Gly Glu Leu Ser
130 135 140

Gly Arg Asn Val Glu Thr Gly Gln Glu Met Phe Cys Ser Gly Phe Gln
145 150 155 160

Thr Cys Ala Arg Glu Val Leu Gln Tyr Leu Ala Lys His Glu Asn Thr
165 170 175

Arg Asp Leu Lys Ser Ser Gln Leu Val Thr His Leu His Arg Val Val
180 185 190

Ser Glu Leu Leu Gln Gly Gly Thr Ser Arg Lys Pro Ser Asp Pro Ala
195 200 205

Pro Lys Val Met Asp Phe Lys Glu Lys Pro Ser Ser Pro Ala Lys Gly
210 215 220

Ser Glu Gly Pro Gly Lys Asn Cys Val Pro Val Ile Gln Arg Thr Phe
225 230 235 240

Ala His Ser Ser Gly Glu Gln Ser Gly Ser Asp Thr Asp Thr Asp Ser
245 250 255

198

Gly Tyr Gly Gly Glu Ser Glu Lys Gly Asp Leu Arg Ser Glu Gln Pro
260 265 270

Cys Phe Lys Ser Asp His Gly Arg Arg Phe Thr Met Gly Glu Arg Ile
275 280 285

Gly Ala Ile Lys Gln Glu Ser Glu Glu Pro Pro Thr Lys Lys Asn Arg
290 295 300

Met Gln Leu Ser Asp Asp Glu Gly His Phe Thr Ser Ser Asp Leu Ile
305 310 315 320

Ser Ser Pro Phe Leu Gly Pro His Pro His Gln Pro Pro Phe Cys Leu
325 330 335

Pro Phe Tyr Leu Ile Pro Pro Ser Ala Thr Ala Tyr Leu Pro Met Leu
340 345 350

Glu Lys Cys Trp Tyr Pro Thr Ser Val Pro Val Leu Tyr Pro Gly Leu
355 360 365

Asn Ala Ser Ala Ala Ala Leu Ser Ser Phe Met Asn Pro Asp Lys Ile
370 375 380

Ser Ala Pro Leu Leu Met Pro Gln Arg Leu Pro Ser Pro Leu Pro Ala
385 390 395 400

His Pro Ser Val Asp Ser Ser Val Leu Leu Gln Ala Leu Lys Pro Ile
405 410 415

Pro Pro Leu Asn Leu Glu Thr Lys Asp
420 425

<210> 160
<211> 425
<212> PRT
<213> Homo sapien

<400> 160

Cys Arg Gln Glu Arg Ala Val Ala Pro Ala Arg Arg Ala Met Glu Arg
1 5 10 15

Ile Pro Ser Ala Gln Pro Pro Ala Cys Leu Pro Lys Ala Pro Gly
20 25 30

Leu Glu His Gly Asp Leu Pro Gly Met Tyr Pro Ala His Met Tyr Gln
35 40 45

199

Val Tyr Lys Ser Arg Arg Gly Ile Lys Arg Ser Glu Asp Ser Lys Glu
50 55 60

Thr Tyr Lys Leu Pro His Arg Leu Ile Glu Lys Lys Arg Arg Asp Arg
65 70 75 80

Ile Asn Glu Cys Ile Ala Gln Leu Lys Asp Leu Leu Pro Glu His Leu
85 90 95

Lys Leu Thr Thr Leu Gly His Leu Glu Lys Ala Val Val Leu Glu Leu
100 105 110

Thr Leu Lys His Val Lys Ala Leu Thr Asn Leu Ile Asp Gln Gln Gln
115 120 125

Gln Lys Ile Ile Ala Leu Gln Ser Gly Leu Gln Ala Gly Glu Leu Ser
130 135 140

Gly Arg Asn Val Glu Thr Gly Gln Glu Met Phe Cys Ser Gly Phe Gln
145 150 155 160

Thr Cys Ala Arg Glu Val Leu Gln Tyr Leu Ala Lys His Glu Asn Thr
165 170 175

Arg Asp Leu Lys Ser Ser Gln Leu Val Thr His Leu His Arg Val Val
180 185 190

Ser Glu Leu Leu Gln Gly Gly Thr Ser Arg Lys Pro Ser Asp Pro Ala
195 200 205

Pro Lys Val Met Asp Phe Lys Glu Lys Pro Ser Ser Pro Ala Lys Gly
210 215 220

Ser Glu Gly Pro Gly Lys Asn Cys Val Pro Val Ile Gln Arg Thr Phe
225 230 235 240

Ala His Ser Ser Gly Glu Gln Ser Gly Ser Asp Thr Asp Thr Asp Ser
245 250 255

Gly Tyr Gly Gly Glu Ser Glu Lys Gly Asp Leu Arg Ser Glu Gln Pro
260 265 270

Cys Phe Lys Ser Asp His Gly Arg Arg Phe Thr Met Gly Glu Arg Ile
275 280 285

200

Gly Ala Ile Lys Gln Glu Ser Glu Glu Pro Pro Thr Lys Lys Asn Arg
290 295 300

Met Gln Leu Ser Asp Asp Glu Gly His Phe Thr Ser Ser Asp Leu Ile
305 310 315 320

Ser Ser Pro Phe Leu Gly Pro His Pro His Gln Pro Pro Phe Cys Leu
325 330 335

Pro Phe Tyr Leu Ile Pro Pro Ser Ala Thr Ala Tyr Leu Pro Met Leu
340 345 350

Glu Lys Cys Trp Tyr Pro Thr Ser Val Pro Val Leu Tyr Pro Gly Leu
355 360 365

Asn Ala Ser Ala Ala Ala Leu Ser Ser Phe Met Asn Pro Asp Lys Ile
370 375 380

Ser Ala Pro Leu Leu Met Pro Gln Arg Leu Pro Ser Pro Leu Pro Ala
385 390 395 400

His Pro Ser Val Asp Ser Ser Val Leu Leu Gln Ala Leu Lys Pro Ile
405 410 415

Pro Pro Leu Asn Leu Glu Thr Lys Asp
420 425

<210> 161
<211> 64
<212> PRT
<213> Homo sapien

<400> 161

His Val Leu Glu Leu Leu Pro Gly Gln Leu Glu Gln Asp Asp Ser Gly
1 5 10 15

Pro Gly Val Thr Ser Gly Gln Cys Ala Gly Val Lys Asp Leu Thr Gly
20 25 30

Leu Arg Arg Asp Leu Arg Phe Arg Pro Gly Ser Gly Ala Val Lys Leu
35 40 45

Pro Val Glu Leu Ala Leu Ala Phe Arg Asn Ser Ser Ser Phe Cys Arg
50 55 60

<210> 162

201

<211> 111
<212> PRT
<213> Homo sapien

<400> 162

Asn Phe Lys Gln Ala Val Ser Thr Gly Leu Asn Ser Pro His Pro His
1 5 10 15

Gln Pro Pro Phe Cys Leu Pro Phe Tyr Leu Ile Pro Pro Ser Ala Thr
20 25 30

Ala Tyr Leu Pro Met Leu Glu Lys Cys Trp Tyr Pro Thr Ser Val Pro
35 40 45

Val Leu Tyr Pro Gly Leu Asn Ala Ser Ala Ala Leu Ser Ser Phe
50 55 60

Met Asn Pro Asp Lys Ile Ser Ala Pro Leu Leu Met Pro Gln Arg Leu
65 70 75 80

Pro Ser Pro Leu Pro Ala His Pro Ser Val Asp Ser Ser Val Leu Leu
85 90 95

Gln Ala Leu Lys Pro Ile Pro Pro Leu Asn Leu Glu Thr Lys Asp
100 105 110

<210> 163
<211> 145
<212> PRT
<213> Homo sapien

<400> 163

Met Gly Lys Ser Arg Cys Pro Glu Gly Phe Pro Ile Ala Glu Val Phe
1 5 10 15

Thr Leu Lys Pro Leu Glu Phe Gly Lys Pro Asn Thr Leu Val Cys Phe
20 25 30

Val Ser Asn Leu Phe Pro Pro Met Leu Thr Val Asn Trp Gln His His
35 40 45

Ser Val Pro Val Glu Gly Phe Gly Pro Thr Phe Val Ser Ala Val Asp
50 55 60

Gly Leu Ser Phe Gln Ala Phe Ser Tyr Leu Asn Phe Thr Pro Glu Pro
65 70 75 80

202

Ser Asp Ile Phe Ser Cys Ile Val Thr His Glu Ile Asp Arg Tyr Thr
85 90 95

Ala Ile Ala Tyr Trp Val Pro Arg Asn Ala Leu Pro Ser Asp Leu Leu
100 105 110

Glu Asn Val Leu Cys Gly Val Ala Phe Gly Leu Gly Val Leu Gly Ile
115 120 125

Ile Val Gly Ile Val Leu Ile Ile Tyr Phe Arg Lys Pro Cys Ser Gly
130 135 140

Asp
145

<210> 164
<211> 270
<212> PRT
<213> Homo sapien

<400> 164

Leu Leu Pro Thr Val Trp Gln Glu Gly Met Gly His Glu Gln Asn Gln
1 5 10 15

Gly Ala Ala Leu Leu Gln Met Leu Pro Leu Leu Trp Leu Leu Pro His
20 25 30

Ser Trp Ala Val Pro Glu Ala Pro Thr Pro Met Trp Pro Asp Asp Leu
35 40 45

Gln Asn His Thr Phe Leu His Thr Val Tyr Cys Gln Asp Gly Ser Pro
50 55 60

Ser Val Gly Leu Ser Glu Ala Tyr Asp Glu Asp Gln Leu Phe Phe Phe
65 70 75 80

Asp Phe Ser Gln Asn Thr Arg Val Pro Arg Leu Pro Glu Phe Ala Asp
85 90 95

Trp Ala Gln Glu Gln Gly Asp Ala Pro Ala Ile Leu Phe Asp Lys Glu
100 105 110

Phe Cys Glu Trp Met Ile Gln Gln Ile Gly Pro Lys Leu Asp Gly Lys
115 120 125

Ile Pro Val Ser Arg Gly Phe Pro Ile Ala Glu Val Phe Thr Leu Lys
130 135 140

203

Pro Leu Glu Phe Gly Lys Pro Asn Thr Leu Val Cys Phe Val Ser Asn
145 150 155 160

Leu Phe Pro Pro Met Leu Thr Val Asn Trp Gln His His Ser Val Pro
165 170 175

Val Glu Gly Phe Gly Pro Thr Phe Val Ser Ala Val Asp Gly Leu Ser
180 185 190

Phe Gln Ala Phe Ser Tyr Leu Asn Phe Thr Pro Glu Pro Ser Asp Ile
195 200 205

Phe Ser Cys Ile Val Thr His Glu Ile Asp Arg Tyr Thr Ala Ile Ala
210 215 220

Tyr Trp Val Pro Arg Asn Ala Leu Pro Ser Asp Leu Leu Glu Asn Val
225 230 235 240

Leu Cys Gly Val Ala Phe Gly Leu Gly Val Leu Gly Ile Ile Val Gly
245 250 255

Ile Val Leu Ile Ile Tyr Phe Arg Lys Pro Cys Ser Gly Asp
260 265 270

<210> 165

<211> 180

<212> PRT

<213> Homo sapien

<400> 165

His Ser Gly Leu Phe Leu Cys Leu Phe Val Ala Glu Leu Glu Pro Ala
1 5 10 15

Ile Leu Phe Asp Lys Glu Phe Cys Glu Trp Met Ile Gln Gln Ile Gly
20 25 30

Pro Lys Leu Asp Gly Lys Ile Pro Val Ser Arg Gly Phe Pro Ile Ala
35 40 45

Glu Val Phe Thr Leu Lys Pro Leu Glu Phe Gly Lys Pro Asn Thr Leu
50 55 60

Val Cys Phe Val Ser Asn Leu Phe Pro Pro Met Leu Thr Val Asn Trp
65 70 75 80

204

Gln His His Ser Val Pro Val Glu Gly Phe Gly Pro Thr Phe Val Ser
85 90 95

Ala Val Asp Gly Leu Ser Phe Gln Ala Phe Ser Tyr Leu Asn Phe Thr
100 105 110

Pro Glu Pro Ser Asp Ile Phe Ser Cys Ile Val Thr His Glu Ile Asp
115 120 125

Arg Tyr Thr Ala Ile Ala Tyr Trp Val Pro Arg Asn Ala Leu Pro Ser
130 135 140

Asp Leu Leu Glu Asn Val Leu Cys Gly Val Ala Phe Gly Leu Gly Val
145 150 155 160

Leu Gly Ile Ile Val Gly Ile Val Leu Ile Ile Tyr Phe Arg Lys Pro
165 170 175

Cys Ser Gly Asp
180

<210> 166
<211> 796
<212> PRT
<213> Homo sapien

<400> 166

Met Ser Leu Asp Asp Asn Leu Ser Gly Thr Ser Gly Met Glu Val Asp
1 5 10 15

Asp Arg Val Ser Ala Leu Glu Gln Arg Leu Gln Leu Gln Glu Asp Glu
20 25 30

Leu Ala Val Leu Lys Ala Ala Leu Ala Asp Ala Leu Arg Arg Leu Arg
35 40 45

Ala Cys Glu Glu Gln Gly Ala Ala Leu Arg Ala Arg Gly Thr Pro Lys
50 55 60

Gly Arg Ala Pro Pro Arg Leu Gly Thr Thr Ala Ser Val Cys Gln Leu
65 70 75 80

Leu Lys Gly Leu Pro Thr Arg Thr Pro Leu Asn Gly Ser Gly Pro Pro
85 90 95

Arg Arg Val Gly Gly Tyr Ala Thr Ser Pro Ser Ser Pro Lys Lys Glu
100 105 110

205

Ala Thr Ser Gly Arg Ser Ser Val Arg Arg Tyr Leu Ser Pro Glu Arg
115 120 125

Leu Ala Ser Val Arg Arg Glu Asp Pro Arg Ser Arg Thr Thr Ser Ser
130 135 140

Ser Ser Asn Cys Ser Ala Lys Lys Glu Gly Lys Thr Lys Glu Val Ile
145 150 155 160

Phe Ser Val Glu Asp Gly Ser Val Lys Met Phe Leu Arg Gly Arg Pro
165 170 175

Val Pro Met Met Ile Pro Asp Glu Leu Ala Pro Thr Tyr Ser Leu Asp
180 185 190

Thr Arg Ser Glu Leu Pro Ser Cys Arg Leu Lys Leu Glu Trp Val Tyr
195 200 205

Gly Tyr Arg Gly Arg Asp Cys Arg Ala Asn Leu Tyr Leu Leu Pro Thr
210 215 220

Gly Glu Ile Val Tyr Phe Val Ala Ser Val Ala Val Leu Tyr Ser Val
225 230 235 240

Glu Glu Gln Arg Gln Arg His Tyr Leu Gly His Asn Asp Asp Ile Lys
245 250 255

Cys Leu Ala Ile His Pro Asp Met Val Thr Ile Ala Thr Gly Gln Val
260 265 270

Ala Gly Thr Thr Lys Glu Gly Lys Pro Leu Pro Pro His Val Arg Ile
275 280 285

Trp Asp Ser Val Ser Leu Ser Thr Leu His Val Leu Gly Leu Gly Val
290 295 300

Phe Asp Arg Ala Val Cys Cys Val Gly Phe Ser Lys Ser Asn Gly Gly
305 310 315 320

Asn Leu Leu Cys Ala Val Asp Glu Ser Asn Asp His Met Leu Ser Val
325 330 335

Trp Asp Trp Ala Lys Glu Thr Lys Val Val Asp Val Lys Cys Ser Asn
340 345 350

Glu Ala Val Leu Val Ala Thr Phe His Pro Thr Asp Pro Thr Val Leu
355 360 365

Ile Thr Cys Gly Lys Ser His Ile Tyr Phe Trp Thr Leu Glu Gly Gly
370 375 380

Ser Leu Ser Lys Arg Gln Gly Leu Phe Glu Lys His Glu Lys Pro Lys
385 390 395 400

Tyr Val Leu Cys Val Thr Phe Leu Glu Gly Asp Val Val Thr Gly
405 410 415

Asp Ser Gly Gly Asn Leu Tyr Val Trp Gly Lys Gly Gly Asn Arg Ile
420 425 430

Thr Gln Ala Val Leu Gly Ala His Asp Gly Gly Val Phe Gly Leu Cys
435 440 445

Ala Leu Arg Asp Gly Thr Leu Val Ser Gly Gly Arg Asp Arg Arg
450 455 460

Val Val Leu Trp Gly Ser Asp Tyr Ser Lys Leu Gln Glu Val Glu Val
465 470 475 480

Pro Glu Asp Phe Gly Pro Val Arg Thr Val Ala Glu Gly His Gly Asp
485 490 495

Thr Leu Tyr Val Gly Thr Thr Arg Asn Ser Ile Leu Gln Gly Ser Val
500 505 510

His Thr Gly Phe Ser Leu Leu Val Gln Gly His Val Glu Glu Leu Trp
515 520 525

Gly Leu Ala Thr His Pro Ser Arg Ala Gln Phe Val Thr Cys Gly Gln
530 535 540

Asp Lys Leu Val His Leu Trp Ser Ser Asp Ser His Gln Pro Leu Trp
545 550 555 560

Ser Arg Ile Ile Glu Asp Pro Ala Arg Ser Ala Gly Phe His Pro Ser
565 570 575

Gly Ser Val Leu Ala Val Gly Thr Val Thr Gly Arg Trp Leu Leu Leu
580 585 590

207

Asp Thr Glu Thr His Asp Leu Val Ala Ile His Thr Asp Gly Asn Glu
595 600 605

Gln Ile Ser Val Val Ser Phe Ser Pro Asp Gly Ala Tyr Leu Ala Val
610 615 620

Gly Ser His Asp Asn Leu Val Tyr Val Tyr Thr Val Asp Gln Gly Gly
625 630 635 640

Arg Lys Val Ser Arg Leu Gly Lys Cys Ser Gly His Ser Ser Phe Ile
645 650 655

Thr His Leu Asp Trp Ala Gln Asp Ser Ser Cys Phe Val Thr Asn Ser
660 665 670

Gly Asp Tyr Glu Ile Leu Tyr Trp Asp Pro Ala Thr Cys Lys Gln Ile
675 680 685

Thr Ser Ala Asp Ala Val Arg Asn Met Glu Trp Ala Thr Ala Thr Cys
690 695 700

Val Leu Gly Phe Gly Val Phe Gly Ile Trp Ser Glu Gly Ala Asp Gly
705 710 715 720

Thr Asp Ile Asn Ala Val Ala Arg Ser His Asp Gly Lys Leu Leu Ala
725 730 735

Ser Ala Asp Asp Phe Gly Lys Val His Leu Phe Ser Tyr Pro Cys Cys
740 745 750

Gln Pro Arg Ala Leu Ser His Lys Tyr Gly Gly His Ser Ser His Val
755 760 765

Thr Asn Val Ala Phe Leu Trp Asp Asp Ser Met Ala Leu Thr Thr Gly
770 775 780

Gly Lys Asp Thr Ser Val Leu Gln Trp Arg Val Val
785 790 795

<210> 167
<211> 627
<212> PRT
<213> Homo sapien

<400> 167

Met Phe Leu Arg Gly Arg Pro Val Pro Met Met Ile Pro Asp Glu Leu
1 5 10 15

Ala Pro Thr Tyr Ser Leu Asp Thr Arg Ser Glu Leu Pro Ser Cys Arg
20 25 30

Leu Lys Leu Glu Trp Val Tyr Gly Tyr Arg Gly Arg Asp Cys Arg Ala
35 40 45

Asn Leu Tyr Leu Leu Pro Thr Gly Glu Ile Val Tyr Phe Val Ala Ser
50 55 60

Val Ala Val Leu Tyr Ser Val Glu Glu Gln Arg Gln Arg His Tyr Leu
65 70 75 80

Gly His Asn Asp Asp Ile Lys Cys Leu Ala Ile His Pro Asp Met Val
85 90 95

Thr Ile Ala Thr Gly Gln Val Ala Gly Thr Thr Lys Glu Gly Lys Pro
100 105 110

Leu Pro Pro His Val Arg Ile Trp Asp Ser Val Ser Leu Ser Thr Leu
115 120 125

His Val Leu Gly Leu Gly Val Phe Asp Arg Ala Val Cys Cys Val Gly
130 135 140

Phe Ser Lys Ser Asn Gly Gly Asn Leu Leu Cys Ala Val Asp Glu Ser
145 150 155 160

Asn Asp His Met Leu Ser Val Trp Asp Trp Ala Lys Glu Thr Lys Val
165 170 175

Val Asp Val Lys Cys Ser Asn Glu Ala Val Leu Val Ala Thr Phe His
180 185 190

Pro Thr Asp Pro Thr Val Leu Ile Thr Cys Gly Lys Ser His Ile Tyr
195 200 205

Phe Trp Thr Leu Glu Gly Gly Ser Leu Ser Lys Arg Gln Gly Leu Phe
210 215 220

Glu Lys His Glu Lys Pro Lys Tyr Val Leu Cys Val Thr Phe Leu Glu
225 230 235 240

Gly Gly Asp Val Val Thr Gly Asp Ser Gly Gly Asn Leu Tyr Val Trp
245 250 255

209

Gly Lys Gly Gly Asn Arg Ile Thr Gln Ala Val Leu Gly Ala His Asp
260 265 270

Gly Gly Val Phe Gly Leu Cys Ala Leu Arg Asp Gly Thr Leu Val Ser
275 280 285

Gly Gly Gly Arg Asp Arg Arg Val Val Leu Trp Gly Ser Asp Tyr Ser
290 295 300

Lys Leu Gln Glu Val Glu Val Pro Glu Asp Phe Gly Pro Val Arg Thr
305 310 315 320

Val Ala Glu Gly His Gly Asp Thr Leu Tyr Val Gly Thr Thr Arg Asn
325 330 335

Ser Ile Leu Gln Gly Ser Val His Thr Gly Phe Ser Leu Leu Val Gln
340 345 350

Gly His Val Glu Glu Leu Trp Gly Leu Ala Thr His Pro Ser Arg Ala
355 360 365

Gln Phe Val Thr Cys Gly Gln Asp Lys Leu Val His Leu Trp Ser Ser
370 375 380

Asp Ser His Gln Pro Leu Trp Ser Arg Ile Ile Glu Asp Pro Ala Arg
385 390 395 400

Ser Ala Gly Phe His Pro Ser Gly Ser Val Leu Ala Val Gly Thr Val
405 410 415

Thr Gly Arg Trp Leu Leu Leu Asp Thr Glu Thr His Asp Leu Val Ala
420 425 430

Ile His Thr Asp Gly Asn Glu Gln Ile Ser Val Val Ser Phe Ser Pro
435 440 445

Asp Gly Ala Tyr Leu Ala Val Gly Ser His Asp Asn Leu Val Tyr Val
450 455 460

Tyr Thr Val Asp Gln Gly Gly Arg Lys Val Ser Arg Leu Gly Lys Cys
465 470 475 480

Ser Gly His Ser Ser Phe Ile Thr His Leu Asp Trp Ala Gln Asp Ser
485 490 495

210

Ser Cys Phe Val Thr Asn Ser Gly Asp Tyr Glu Ile Leu Tyr Trp Asp
500 505 510

Pro Ala Thr Cys Lys Gln Ile Thr Ser Ala Asp Ala Val Arg Asn Met
515 520 525

Glu Trp Ala Thr Ala Thr Cys Val Leu Gly Phe Gly Val Phe Gly Ile
530 535 540

Trp Ser Glu Gly Ala Asp Gly Thr Asp Ile Asn Ala Val Ala Arg Ser
545 550 555 560

His Asp Gly Lys Leu Leu Ala Ser Ala Asp Asp Phe Gly Lys Val His
565 570 575

Leu Phe Ser Tyr Pro Cys Cys Gln Pro Arg Ala Leu Ser His Lys Tyr
580 585 590

Gly Gly His Ser Ser His Val Thr Asn Val Ala Phe Leu Trp Asp Asp
595 600 605

Ser Met Ala Leu Thr Thr Gly Gly Lys Asp Thr Ser Val Leu Gln Trp
610 615 620

Arg Val Val
625

<210> 168
<211> 627
<212> PRT
<213> Homo sapien

<400> 168

Met Phe Leu Arg Gly Arg Pro Val Pro Met Met Ile Pro Asp Glu Leu
1 5 10 15

Ala Pro Thr Tyr Ser Leu Asp Thr Arg Ser Glu Leu Pro Ser Cys Arg
20 25 30

Leu Lys Leu Glu Trp Val Tyr Gly Tyr Arg Gly Arg Asp Cys Arg Ala
35 40 45

Asn Leu Tyr Leu Leu Pro Thr Gly Glu Ile Val Tyr Phe Val Ala Ser
50 55 60

Val Ala Val Leu Tyr Ser Val Glu Glu Gln Arg Gln Arg His Tyr Leu
65 70 75 80

211

Gly His Asn Asp Asp Ile Lys Cys Leu Ala Ile His Pro Asp Met Val
85 90 95

Thr Ile Ala Thr Gly Gln Val Ala Gly Thr Thr Lys Glu Gly Lys Pro
100 105 110

Leu Pro Pro His Val Arg Ile Trp Asp Ser Val Ser Leu Ser Thr Leu
115 120 125

His Val Leu Gly Leu Gly Val Phe Asp Arg Ala Val Cys Cys Val Gly
130 135 140

Phe Ser Lys Ser Asn Gly Gly Asn Leu Leu Cys Ala Val Asp Glu Ser
145 150 155 160

Asn Asp His Met Leu Ser Val Trp Asp Trp Ala Lys Glu Thr Lys Val
165 170 175

Val Asp Val Lys Cys Ser Asn Glu Ala Val Leu Val Ala Thr Phe His
180 185 190

Pro Thr Asp Pro Thr Val Leu Ile Thr Cys Gly Lys Ser His Ile Tyr
195 200 205

Phe Trp Thr Leu Glu Gly Gly Ser Leu Ser Lys Arg Gln Gly Leu Phe
210 215 220

Glu Lys His Glu Lys Pro Lys Tyr Val Leu Cys Val Thr Phe Leu Glu
225 230 235 240

Gly Gly Asp Val Val Thr Gly Asp Ser Gly Gly Asn Leu Tyr Val Trp
245 250 255

Gly Lys Gly Gly Asn Arg Ile Thr Gln Ala Val Leu Gly Ala His Asp
260 265 270

Gly Gly Val Phe Gly Leu Cys Ala Leu Arg Asp Gly Thr Leu Val Ser
275 280 285

Gly Gly Gly Arg Asp Arg Arg Val Val Leu Trp Gly Ser Asp Tyr Ser
290 295 300

Lys Leu Gln Glu Val Glu Val Pro Glu Asp Phe Gly Pro Val Arg Thr
305 310 315 320

212

Val Ala Glu Gly His Gly Asp Thr Leu Tyr Val Gly Thr Thr Arg Asn
325 330 335

Ser Ile Leu Gln Gly Ser Val His Thr Gly Phe Ser Leu Leu Val Gln
340 345 350

Gly His Val Glu Glu Leu Trp Gly Leu Ala Thr His Pro Ser Arg Ala
355 360 365

Gln Phe Val Thr Cys Gly Gln Asp Lys Leu Val His Leu Trp Ser Ser
370 375 380

Asp Ser His Gln Pro Leu Trp Ser Arg Ile Ile Glu Asp Pro Ala Arg
385 390 395 400

Ser Ala Gly Phe His Pro Ser Gly Ser Val Leu Ala Val Gly Thr Val
405 410 415

Thr Gly Arg Trp Leu Leu Leu Asp Thr Glu Thr His Asp Leu Val Ala
420 425 430

Ile His Thr Asp Gly Asn Glu Gln Ile Ser Val Val Ser Phe Ser Pro
435 440 445

Asp Gly Ala Tyr Leu Ala Val Gly Ser His Asp Asn Leu Val Tyr Val
450 455 460

Tyr Thr Val Asp Gln Gly Gly Arg Lys Val Ser Arg Leu Gly Lys Cys
465 470 475 480

Ser Gly His Ser Ser Phe Ile Thr His Leu Asp Trp Ala Gln Asp Ser
485 490 495

Ser Cys Phe Val Thr Asn Ser Gly Asp Tyr Glu Ile Leu Tyr Trp Asp
500 505 510

Pro Ala Thr Cys Lys Gln Ile Thr Ser Ala Asp Ala Val Arg Asn Met
515 520 525

Glu Trp Ala Thr Ala Thr Cys Val Leu Gly Phe Gly Val Phe Gly Ile
530 535 540

Trp Ser Glu Gly Ala Asp Gly Thr Asp Ile Asn Ala Val Ala Arg Ser
545 550 555 560

213

His Asp Gly Lys Leu Leu Ala Ser Ala Asp Asp Phe Gly Lys Val His
565 570 575

Leu Phe Ser Tyr Pro Cys Cys Gln Pro Arg Ala Leu Ser His Lys Tyr
580 585 590

Gly Gly His Ser Ser His Val Thr Asn Val Ala Phe Leu Trp Asp Asp
595 600 605

Ser Met Ala Leu Thr Thr Gly Gly Lys Asp Thr Ser Val Leu Gln Trp
610 615 620

Arg Val Val
625

<210> 169
<211> 483
<212> PRT
<213> Homo sapien

<400> 169

Met Leu Glu Arg Arg Ala Leu Leu Trp Gln Arg Glu Ala Gly Pro Gly
1 5 10 15

Trp Gly Asp Arg Ala Arg Ala Gly Thr Gly Gly Ala Gly Gly Cys
20 25 30

Gly Gly Ala Met Ala Glu Arg Gly Pro Ala Phe Cys Gly Leu Tyr Asp
35 40 45

Thr Ser Ser Leu Leu Arg Tyr Cys Asn Asp Asp Asn Leu Ser Gly Thr
50 55 60

Ser Gly Met Glu Val Asp Asp Arg Val Ser Ala Leu Glu Gln Arg Leu
65 70 75 80

Gln Leu Gln Glu Asp Glu Leu Ala Val Leu Lys Ala Ala Leu Ala Asp
85 90 95

Ala Leu Arg Arg Leu Arg Ala Cys Glu Glu Gln Gly Ala Ala Leu Arg
100 105 110

Ala Arg Gly Thr Pro Lys Gly Arg Ala Pro Pro Arg Leu Gly Thr Thr
115 120 125

Ala Ser Val Cys Gln Leu Leu Lys Gly Leu Pro Thr Arg Thr Pro Leu
130 135 140

214

Asn Gly Ser Gly Pro Pro Arg Arg Val Gly Gly Tyr Ala Thr Ser Pro
145 150 155 160

Ser Ser Pro Lys Lys Glu Ala Thr Ser Gly Arg Ser Ser Val Arg Arg
165 170 175

Tyr Leu Ser Pro Glu Arg Leu Ala Ser Val Arg Arg Glu Asp Pro Arg
180 185 190

Ser Arg Thr Thr Ser Ser Ser Asn Cys Ser Ala Lys Lys Glu Gly
195 200 205

Lys Thr Lys Glu Val Ile Phe Ser Val Glu Asp Gly Ser Val Lys Met
210 215 220

Phe Leu Arg Gly Arg Pro Val Pro Met Met Ile Pro Asp Glu Leu Ala
225 230 235 240

Pro Thr Tyr Ser Leu Asp Thr Arg Ser Glu Leu Pro Ser Cys Arg Leu
245 250 255

Lys Leu Glu Trp Val Tyr Gly Tyr Arg Gly Arg Asp Cys Arg Ala Asn
260 265 270

Leu Tyr Leu Leu Pro Thr Gly Glu Ile Val Tyr Phe Val Ala Ser Val
275 280 285

Ala Val Leu Tyr Ser Val Glu Glu Gln Arg Gln Arg His Tyr Leu Gly
290 295 300

His Asn Asp Asp Ile Lys Cys Leu Ala Ile His Pro Asp Met Val Thr
305 310 315 320

Ile Ala Thr Gly Gln Val Ala Gly Thr Thr Lys Glu Gly Lys Pro Leu
325 330 335

Pro Pro His Val Arg Ile Trp Asp Ser Val Ser Leu Ser Thr Leu His
340 345 350

Val Leu Gly Leu Gly Val Phe Asp Arg Ala Val Cys Cys Val Gly Phe
355 360 365

Ser Lys Ser Asn Gly Gly Asn Leu Leu Cys Ala Val Asp Glu Ser Asn
370 375 380

215

Asp His Met Leu Ser Val Trp Asp Trp Ala Lys Glu Thr Lys Val Val
385 390 395 400

Asp Val Lys Cys Ser Asn Glu Ala Val Leu Val Ala Thr Phe His Pro
405 410 415

Thr Asp Pro Thr Val Leu Ile Thr Cys Gly Lys Ser His Ile Tyr Phe
420 425 430

Trp Thr Leu Glu Gly Gly Ser Leu Ser Lys Arg Gln Gly Leu Phe Glu
435 440 445

Lys His Glu Lys Pro Lys Tyr Val Leu Cys Val Thr Phe Leu Glu Gly
450 455 460

Gly Asp Val Val Thr Gly Asp Ser Gly Gly Asn Leu Tyr Val Trp Gly
465 470 475 480

Lys Gly Pro

<210> 170
<211> 605
<212> PRT
<213> Homo sapien

<400> 170

Met Ser Ser Phe Gly Ala Gly Lys Thr Lys Glu Val Ile Phe Ser Val
1 5 10 15

Glu Asp Gly Ser Val Lys Met Phe Leu Arg Gly Arg Pro Val Pro Met
20 25 30

Met Ile Pro Asp Glu Leu Ala Pro Thr Tyr Ser Leu Asp Thr Arg Ser
35 40 45

Glu Leu Pro Ser Cys Arg Leu Lys Leu Glu Trp Val Tyr Gly Tyr Arg
50 55 60

Gly Arg Asp Cys Arg Ala Asn Leu Tyr Leu Leu Pro Thr Gly Glu Ile
65 70 75 80

Val Tyr Phe Val Ala Ser Val Ala Val Leu Tyr Ser Val Glu Glu Gln
85 90 95

Arg Gln Arg His Tyr Leu Gly His Asn Asp Asp Ile Lys Cys Leu Ala

216
100 105 110

Ile His Pro Asp Met Val Thr Ile Ala Thr Gly Gln Val Ala Gly Thr
115 120 125

Thr Lys Glu Gly Lys Pro Leu Pro Pro His Val Arg Ile Trp Asp Ser
130 135 140

Val Ser Leu Ser Thr Leu His Val Leu Gly Leu Gly Val Phe Asp Arg
145 150 155 160

Ala Val Cys Cys Val Gly Phe Ser Lys Ser Asn Gly Gly Asn Leu Leu
165 170 175

Cys Ala Val Asp Glu Ser Asn Asp His Met Leu Ser Val Trp Asp Trp
180 185 190

Ala Lys Glu Thr Lys Val Val Asp Val Lys Cys Ser Asn Glu Ala Val
195 200 205

Leu Val Ala Thr Phe His Pro Thr Asp Pro Thr Val Leu Ile Thr Cys
210 215 220

Gly Lys Ser His Ile Tyr Phe Trp Thr Leu Glu Gly Gly Ser Leu Ser
225 230 235 240

Lys Arg Gln Gly Leu Phe Glu Lys His Glu Lys Pro Lys Tyr Val Leu
245 250 255

Cys Val Thr Phe Leu Glu Gly Gly Asp Val Val Thr Gly Asp Ser Gly
260 265 270

Gly Asn Leu Tyr Val Trp Gly Lys Gly Gly Asn Arg Ile Thr Gln Ala
275 280 285

Val Leu Gly Ala His Asp Gly Gly Val Phe Gly Leu Cys Ala Leu Arg
290 295 300

Asp Gly Thr Leu Val Ser Gly Gly Arg Asp Arg Arg Val Val Leu
305 310 315 320

Trp Gly Ser Asp Tyr Ser Lys Leu Gln Glu Val Glu Val Pro Glu Asp
325 330 335

Phe Gly Pro Val Arg Thr Val Ala Glu Gly His Gly Asp Thr Leu Tyr
340 345 350

Val Gly Thr Thr Arg Asn Ser Ile Leu Gln Gly Ser Val His Thr Gly
355 360 365

Phe Ser Leu Leu Val Gln Asp Pro Ala Arg Ser Ala Gly Phe His Pro
370 375 380

Ser Gly Ser Val Leu Ala Val Gly Thr Val Thr Gly Arg Trp Leu Leu
385 390 395 400

Leu Asp Thr Glu Thr His Asp Leu Val Ala Ile His Thr Asp Gly Asn
405 410 415

Glu Gln Ile Ser Val Val Ser Phe Ser Pro Asp Gly Ala Tyr Leu Ala
420 425 430

Val Gly Ser His Asp Asn Leu Val Tyr Val Tyr Thr Val Asp Gln Gly
435 440 445

Gly Arg Lys Val Ser Arg Leu Gly Lys Cys Ser Gly His Ser Ser Phe
450 455 460

Ile Thr His Leu Asp Trp Ala Gln Asp Ser Ser Cys Phe Val Thr Asn
465 470 475 480

Ser Gly Asp Tyr Glu Ile Leu Tyr Trp Asp Pro Ala Thr Cys Lys Gln
485 490 495

Ile Thr Ser Ala Asp Ala Val Arg Asn Met Glu Trp Ala Thr Ala Thr
500 505 510

Cys Val Leu Gly Phe Gly Val Phe Gly Ile Trp Ser Glu Gly Ala Asp
515 520 525

Gly Thr Asp Ile Asn Ala Val Ala Arg Ser His Asp Gly Lys Leu Leu
530 535 540

Ala Ser Ala Asp Asp Phe Gly Lys Val His Leu Phe Ser Tyr Pro Cys
545 550 555 560

Cys Gln Pro Arg Ala Leu Ser His Lys Tyr Gly Gly His Ser Ser His
565 570 575

Val Thr Asn Val Ala Phe Leu Trp Asp Asp Ser Met Ala Leu Thr Thr
580 585 590

218

Gly Gly Lys Asp Thr Ser Val Leu Gln Trp Arg Val Val
595 600 605

<210> 171
<211> 495
<212> PRT
<213> Homo sapien

<400> 171

Met Ser Ser Phe Gly Ala Gly Lys Thr Lys Glu Val Ile Phe Ser Val
1 5 10 15

Glu Asp Gly Ser Val Lys Met Phe Leu Arg Gly Arg Pro Val Pro Met
20 25 30

Met Ile Pro Asp Glu Leu Ala Pro Thr Tyr Ser Leu Asp Thr Arg Ser
35 40 45

Glu Leu Pro Ser Cys Arg Leu Lys Leu Glu Trp Val Tyr Gly Tyr Arg
50 55 60

Gly Arg Asp Cys Arg Ala Asn Leu Tyr Leu Leu Pro Thr Gly Glu Ile
65 70 75 80

Val Tyr Phe Val Ala Ser Val Ala Val Leu Tyr Ser Val Glu Glu Gln
85 90 95

Arg Gln Arg His Tyr Leu Gly His Asn Asp Asp Ile Lys Cys Leu Ala
100 105 110

Ile His Pro Asp Met Val Thr Ile Ala Thr Gly Gln Val Ala Gly Thr
115 120 125

Thr Lys Glu Gly Lys Pro Leu Pro Pro His Val Arg Ile Trp Asp Ser
130 135 140

Val Ser Leu Ser Thr Leu His Val Leu Gly Leu Gly Val Phe Asp Arg
145 150 155 160

Ala Val Cys Cys Val Gly Phe Ser Lys Ser Asn Gly Gly Asn Leu Leu
165 170 175

Cys Ala Val Asp Glu Ser Asn Asp His Met Leu Ser Val Trp Asp Trp
180 185 190

Ala Lys Glu Thr Lys Val Val Asp Val Lys Cys Ser Asn Glu Ala Val

219

195

200

205

Leu Val Ala Thr Phe His Pro Thr Asp Pro Thr Val Leu Ile Thr Cys
210 215 220

Gly Lys Ser His Ile Tyr Phe Trp Thr Leu Glu Gly Gly Ser Leu Ser
225 230 235 240

Lys Arg Gln Gly Leu Phe Glu Lys His Glu Lys Pro Lys Tyr Val Leu
245 250 255

Cys Val Thr Phe Leu Glu Gly Gly Asp Val Val Thr Gly Asp Ser Gly
260 265 270

Gly Asn Leu Tyr Val Trp Gly Lys Gly Gly Asn Arg Ile Thr Gln Ala
275 280 285

Val Leu Gly Ala His Asp Gly Gly Val Phe Gly Leu Cys Ala Leu Arg
290 295 300

Asp Gly Thr Leu Val Ser Gly Gly Arg Asp Arg Arg Val Val Leu
305 310 315 320

Trp Gly Ser Asp Tyr Ser Lys Leu Gln Glu Val Glu Val Pro Glu Asp
325 330 335

Phe Gly Pro Val Arg Thr Val Ala Glu Gly His Gly Asp Thr Leu Tyr
340 345 350

Val Gly Thr Thr Arg Asn Ser Ile Leu Gln Gly Ser Val His Thr Gly
355 360 365

Phe Ser Leu Leu Val Gln Gly His Val Glu Glu Leu Trp Gly Leu Ala
370 375 380

Thr His Pro Ser Arg Ala Gln Phe Val Thr Cys Gly Gln Asp Lys Leu
385 390 395 400

Val His Leu Trp Ser Ser Asp Ser His Gln Pro Leu Trp Ser Arg Ile
405 410 415

Ile Glu Asp Pro Ala Arg Ser Ala Gly Phe His Pro Ser Gly Ser Val
420 425 430

Leu Ala Val Gly Thr Val Thr Gly Arg Trp Leu Leu Leu Asp Thr Glu
435 440 445

220

Thr His Asp Leu Val Ala Ile His Thr Asp Gly Asn Glu Gln Ile Ser
450 455 460

Val Val Ser Phe Ser Pro Gly Pro Phe Gln Phe Tyr His Pro Pro Gly
465 470 475 480

Leu Gly Pro Gly Gln Gln Leu Leu Cys His Gln Leu Arg Gly Leu
485 490 495

<210> 172

<211> 536

<212> PRT

<213> Homo sapien

<400> 172

Ile Gly Arg Gly Arg Pro Gly Gln Val Ala Gly Thr Thr Lys Glu Gly
1 5 10 15

Lys Pro Leu Pro Pro His Val Arg Ile Trp Asp Ser Val Ser Leu Ser
20 25 30

Thr Leu His Val Leu Gly Leu Gly Val Phe Asp Arg Ala Val Cys Cys
35 40 45

Val Gly Phe Ser Lys Ser Cys Ser Asn Glu Ala Val Leu Val Ala Thr
50 55 60

Phe His Pro Thr Asp Pro Thr Val Leu Ile Thr Cys Gly Lys Ser His
65 70 75 80

Ile Tyr Phe Trp Thr Leu Glu Gly Ser Leu Ser Lys Arg Gln Gly
85 90 95

Leu Phe Glu Lys His Glu Lys Pro Lys Tyr Val Leu Cys Val Thr Phe
100 105 110

Leu Glu Gly Asp Val Val Thr Gly Asp Ser Gly Gly Asn Leu Tyr
115 120 125

Val Trp Gly Lys Gly Gly Asn Arg Ile Thr Gln Ala Val Leu Gly Ala
130 135 140

His Asp Gly Gly Val Phe Gly Leu Cys Ala Leu Arg Asp Gly Thr Leu
145 150 155 160

221

Val Ser Gly Gly Arg Asp Arg Arg Val Val Leu Trp Gly Ser Asp
165 170 175

Tyr Ser Lys Leu Gln Glu Val Glu Val Pro Glu Asp Phe Gly Pro Val
180 185 190

Arg Thr Val Ala Glu Gly His Gly Asp Thr Leu Tyr Val Gly Thr Thr
195 200 205

Arg Asn Ser Ile Leu Gln Gly Ser Val His Thr Gly Phe Ser Leu Leu
210 215 220

Val Gln Asp Pro Ala Thr Lys Ser Leu Thr Pro Ser Thr Ala Glu Gly
225 230 235 240

Pro Gln Ala Pro Ala Pro Thr Val Leu Pro Pro Ala Thr Leu Ile Gly
245 250 255

Gly Gly Thr Leu Gln Gly His Val Glu Glu Leu Trp Gly Leu Ala Thr
260 265 270

His Pro Ser Arg Ala Gln Phe Val Thr Cys Gly Gln Asp Lys Leu Val
275 280 285

His Leu Trp Ser Ser Asp Ser His Gln Pro Leu Trp Ser Arg Ile Ile
290 295 300

Glu Asp Pro Ala Arg Ser Ala Gly Phe His Pro Ser Gly Ser Val Leu
305 310 315 320

Ala Val Gly Thr Val Thr Gly Arg Trp Leu Leu Leu Asp Thr Glu Thr
325 330 335

His Asp Leu Val Ala Ile His Thr Asp Gly Asn Glu Gln Ile Ser Val
340 345 350

Val Ser Phe Ser Pro Asp Gly Ala Tyr Leu Ala Val Gly Ser His Asp
355 360 365

Asn Leu Val Tyr Val Tyr Thr Val Asp Gln Gly Gly Arg Lys Val Ser
370 375 380

Arg Leu Gly Lys Cys Ser Gly His Ser Ser Phe Ile Thr His Leu Asp
385 390 395 400

Trp Ala Gln Asp Ser Ser Cys Phe Val Thr Asn Ser Gly Asp Tyr Glu

222
405 410 415

Ile Leu Tyr Trp Asp Pro Ala Thr Cys Lys Gln Ile Thr Ser Ala Asp
420 425 430

Ala Val Arg Asn Met Glu Trp Ala Thr Ala Thr Cys Val Leu Gly Phe
435 440 445

Gly Val Phe Gly Ile Trp Ser Glu Gly Ala Asp Gly Thr Asp Ile Asn
450 455 460

Ala Val Ala Arg Ser His Asp Gly Lys Leu Leu Ala Ser Ala Asp Asp
465 470 475 480

Phe Gly Lys Val His Leu Phe Ser Tyr Pro Cys Cys Gln Pro Arg Ala
485 490 495

Leu Ser His Lys Tyr Gly Gly His Ser Ser His Val Thr Asn Val Ala
500 505 510

Phe Leu Trp Asp Asp Ser Met Ala Leu Thr Thr Gly Gly Lys Asp Thr
515 520 525

Ser Val Leu Gln Trp Arg Val Val
530 535

<210> 173
<211> 544
<212> PRT
<213> Homo sapien

<400> 173

Arg Leu Gly Ser Gly Leu Gly Val Asn Gly Arg Gly Arg Pro Gly Gln
1 5 10 15

Val Ala Gly Thr Thr Lys Glu Gly Lys Pro Leu Pro Pro His Val Arg
20 25 30

Ile Trp Asp Ser Val Ser Leu Ser Thr Leu His Val Leu Gly Leu Gly
35 40 45

Val Phe Asp Arg Ala Val Cys Cys Val Gly Phe Ser Lys Ser Cys Ser
50 55 60

Asn Glu Ala Val Leu Val Ala Thr Phe His Pro Thr Asp Pro Thr Val
65 70 75 80

223

Leu Ile Thr Cys Gly Lys Ser His Ile Tyr Phe Trp Thr Leu Glu Gly
85 90 95

Gly Ser Leu Ser Lys Arg Gln Gly Leu Phe Glu Lys His Glu Lys Pro
100 105 110

Lys Tyr Val Leu Cys Val Thr Phe Leu Glu Gly Gly Asp Val Val Thr
115 120 125

Gly Asp Ser Gly Gly Asn Leu Tyr Val Trp Gly Lys Gly Gly Asn Arg
130 135 140

Ile Thr Gln Ala Val Leu Gly Ala His Asp Gly Gly Val Phe Gly Leu
145 150 155 160

Cys Ala Leu Arg Asp Gly Thr Leu Val Ser Gly Gly Arg Asp Arg
165 170 175

Arg Val Val Leu Trp Gly Ser Asp Tyr Ser Lys Leu Gln Glu Val Glu
180 185 190

Val Pro Glu Asp Phe Gly Pro Val Arg Thr Val Ala Glu Gly His Gly
195 200 205

Asp Thr Leu Tyr Val Gly Thr Thr Arg Asn Ser Ile Leu Gln Gly Ser
210 215 220

Val His Thr Gly Phe Ser Leu Leu Val Gln Asp Pro Ala Thr Lys Ser
225 230 235 240

Leu Thr Pro Ser Thr Ala Glu Gly Pro Gln Ala Pro Ala Pro Thr Val
245 250 255

Leu Pro Pro Ala Thr Leu Ile Gly Gly Thr Leu Gln Gly His Val
260 265 270

Glu Glu Leu Trp Gly Leu Ala Thr His Pro Ser Arg Ala Gln Phe Val
275 280 285

Thr Cys Gly Gln Asp Lys Leu Val His Leu Trp Ser Ser Asp Ser His
290 295 300

Gln Pro Leu Trp Ser Arg Ile Ile Glu Asp Pro Ala Arg Ser Ala Gly
305 310 315 320

224

Phe His Pro Ser Gly Ser Val Leu Ala Val Gly Thr Val Thr Gly Arg
325 330 335

Trp Leu Leu Leu Asp Thr Glu Thr His Asp Leu Val Ala Ile His Thr
340 345 350

Asp Gly Asn Glu Gln Ile Ser Val Val Ser Phe Ser Pro Asp Gly Ala
355 360 365

Tyr Leu Ala Val Gly Ser His Asp Asn Leu Val Tyr Val Tyr Thr Val
370 375 380

Asp Gln Gly Gly Arg Lys Val Ser Arg Leu Gly Lys Cys Ser Gly His
385 390 395 400

Ser Ser Phe Ile Thr His Leu Asp Trp Ala Gln Asp Ser Ser Cys Phe
405 410 415

Val Thr Asn Ser Gly Asp Tyr Glu Ile Leu Tyr Trp Asp Pro Ala Thr
420 425 430

Cys Lys Gln Ile Thr Ser Ala Asp Ala Val Arg Asn Met Glu Trp Ala
435 440 445

Thr Ala Thr Cys Val Leu Gly Phe Gly Val Phe Gly Ile Trp Ser Glu
450 455 460

Gly Ala Asp Gly Thr Asp Ile Asn Ala Val Ala Arg Ser His Asp Gly
465 470 475 480

Lys Leu Leu Ala Ser Ala Asp Asp Phe Gly Lys Val His Leu Phe Ser
485 490 495

Tyr Pro Cys Cys Gln Pro Arg Ala Leu Ser His Lys Tyr Gly Gly His
500 505 510

Ser Ser His Val Thr Asn Val Ala Phe Leu Trp Asp Asp Ser Met Ala
515 520 525

Leu Thr Thr Gly Gly Lys Asp Thr Ser Val Leu Gln Trp Arg Val Val
530 535 540

<210> 174
<211> 482
<212> PRT
<213> Homo sapien

225

<220>
<221> MISC_FEATURE
<222> (2)...(2)
<223> X=any amino acid

<220>
<221> MISC_FEATURE
<222> (6)...(6)
<223> X=any amino acid

<400> 174

Ser Xaa Gly His Cys Xaa Asp Phe Ile Trp Pro Gly His Trp Leu Ser
1 5 10 15

Thr Trp His Trp Ser Arg Gln Arg Pro Ser Trp Gly Lys Leu Met Phe
20 25 30

Thr Gly Gly Arg Asn Pro Pro Tyr Leu Gln Ala Ala Ser Gln Pro Gln
35 40 45

Glu Ala Thr Arg Leu Ala Glu Ser His Val Glu Ser Ala Ser Asn Met
50 55 60

Glu Gln Leu Thr Arg Glu Thr Glu Asp Tyr Ser Lys Gln Ala Leu Ser
65 70 75 80

Leu Val Arg Lys Ala Leu His Glu Gly Val Gly Ser Gly Ser Gly Ser
85 90 95

Pro Asp Gly Ala Val Val Gln Gly Leu Val Glu Lys Leu Glu Lys Thr
100 105 110

Lys Ser Leu Ala Gln Gln Leu Thr Arg Glu Ala Thr Gln Ala Glu Ile
115 120 125

Glu Ala Asp Arg Ser Tyr Gln His Ser Leu Arg Leu Leu Asp Ser Val
130 135 140

Ser Arg Leu Gln Gly Val Ser Asp Gln Ser Phe Gln Val Glu Glu Ala
145 150 155 160

Lys Arg Ile Lys Gln Lys Ala Asp Ser Leu Ser Ser Leu Val Thr Arg
165 170 175

His Met Asp Glu Phe Lys Arg Thr Gln Lys Asn Leu Gly Asn Trp Lys
180 185 190

Glu Glu Ala Gln Gln Leu Leu Gln Asn Gly Lys Ser Gly Arg Glu Lys
195 200 205

Ser Asp Gln Leu Leu Ser Arg Ala Asn Leu Ala Lys Ser Arg Ala Gln
210 215 220

Glu Ala Leu Ser Met Gly Asn Ala Thr Phe Tyr Glu Val Glu Ser Ile
225 230 235 240

Leu Lys Asn Leu Arg Glu Phe Asp Leu Gln Val Asp Asn Arg Lys Ala
245 250 255

Glu Ala Glu Glu Ala Met Lys Arg Leu Ser Tyr Ile Ser Gln Lys Val
260 265 270

Ser Asp Ala Ser Asp Lys Thr Gln Gln Ala Glu Arg Ala Leu Gly Ser
275 280 285

Ala Ala Ala Asp Ala Gln Arg Ala Lys Asn Gly Ala Gly Glu Ala Leu
290 295 300

Glu Ile Ser Ser Glu Ile Glu Gln Glu Ile Gly Ser Leu Asn Leu Glu
305 310 315 320

Ala Asn Val Thr Ala Asp Gly Ala Leu Ala Met Glu Lys Gly Leu Ala
325 330 335

Ser Leu Lys Ser Glu Met Arg Glu Val Glu Gly Glu Leu Glu Arg Lys
340 345 350

Glu Leu Glu Phe Asp Thr Asn Met Asp Ala Val Gln Met Val Ile Thr
355 360 365

Glu Ala Gln Lys Val Asp Thr Arg Ala Lys Asn Ala Gly Val Thr Ile
370 375 380

Gln Asp Thr Leu Asn Thr Leu Asp Gly Leu Leu His Leu Met Asp Gln
385 390 395 400

Pro Leu Ser Val Asp Glu Glu Gly Leu Val Leu Leu Glu Gln Lys Leu
405 410 415

Ser Arg Ala Lys Thr Gln Ile Asn Ser Gln Leu Arg Pro Met Met Ser
420 425 430

227

Glu Leu Glu Glu Arg Ala Arg Gln Gln Arg Gly His Leu His Leu Leu
435 440 445

Glu Thr Ser Ile Asp Gly Ile Leu Ala Asp Val Lys Asn Leu Glu Asn
450 455 460

Ile Arg Asp Asn Leu Pro Pro Gly Cys Tyr Asn Thr Gln Ala Leu Glu
465 470 475 480

Gln Gln

<210> 175
<211> 454
<212> PRT
<213> Homo sapien

<400> 175

Met Leu Met Phe Thr Gly Gly Arg Asn Pro Pro Tyr Leu Gln Ala Ala
1 5 10 15

Ser Gln Pro Gln Glu Ala Thr Arg Leu Ala Glu Ser His Val Glu Ser
20 25 30

Ala Ser Asn Met Glu Gln Leu Thr Arg Glu Thr Glu Asp Tyr Ser Lys
35 40 45

Gln Ala Leu Ser Leu Val Arg Lys Ala Leu His Glu Gly Val Gly Ser
50 55 60

Gly Ser Gly Ser Pro Asp Gly Ala Val Val Gln Gly Leu Val Glu Lys
65 70 75 80

Leu Glu Lys Thr Lys Ser Leu Ala Gln Gln Leu Thr Arg Glu Ala Thr
85 90 95

Gln Ala Glu Ile Glu Ala Asp Arg Ser Tyr Gln His Ser Leu Arg Leu
100 105 110

Leu Asp Ser Val Ser Arg Leu Gln Gly Val Ser Asp Gln Ser Phe Gln
115 120 125

Val Glu Glu Ala Lys Arg Ile Lys Gln Lys Ala Asp Ser Leu Ser Ser
130 135 140

Leu Val Thr Arg His Met Asp Glu Phe Lys Arg Thr Gln Lys Asn Leu
145 150 155 160

Gly Asn Trp Lys Glu Glu Ala Gln Gln Leu Leu Gln Asn Gly Lys Ser
165 170 175

Gly Arg Glu Lys Ser Asp Gln Leu Leu Ser Arg Ala Asn Leu Ala Lys
180 185 190

Ser Arg Ala Gln Glu Ala Leu Ser Met Gly Asn Ala Thr Phe Tyr Glu
195 200 205

Val Glu Ser Ile Leu Lys Asn Leu Arg Glu Phe Asp Leu Gln Val Asp
210 215 220

Asn Arg Lys Ala Glu Ala Glu Glu Ala Met Lys Arg Leu Ser Tyr Ile
225 230 235 240

Ser Gln Lys Val Ser Asp Ala Ser Asp Lys Thr Gln Gln Ala Glu Arg
245 250 255

Ala Leu Gly Ser Ala Ala Ala Asp Ala Gln Arg Ala Lys Asn Gly Ala
260 265 270

Gly Glu Ala Leu Glu Ile Ser Ser Glu Ile Glu Gln Glu Ile Gly Ser
275 280 285

Leu Asn Leu Glu Ala Asn Val Thr Ala Asp Gly Ala Leu Ala Met Glu
290 295 300

Lys Gly Leu Ala Ser Leu Lys Ser Glu Met Arg Glu Val Glu Gly Glu
305 310 315 320

Leu Glu Arg Lys Glu Leu Glu Phe Asp Thr Asn Met Asp Ala Val Gln
325 330 335

Met Val Ile Thr Glu Ala Gln Lys Val Asp Thr Arg Ala Lys Asn Ala
340 345 350

Gly Val Thr Ile Gln Asp Thr Leu Asn Thr Leu Asp Gly Leu Leu His
355 360 365

Leu Met Asp Gln Pro Leu Ser Val Asp Glu Glu Gly Leu Val Leu Leu
370 375 380

Glu Gln Lys Leu Ser Arg Ala Lys Thr Gln Ile Asn Ser Gln Leu Arg
385 390 395 400

Pro Met Met Ser Glu Leu Glu Glu Arg Ala Arg Gln Gln Arg Gly His
405 410 415

Leu His Leu Leu Glu Thr Ser Ile Asp Gly Ile Leu Ala Asp Val Lys
420 425 430

Asn Leu Glu Asn Ile Arg Asp Asn Leu Pro Pro Gly Cys Tyr Asn Thr
435 440 445

Gln Ala Leu Glu Gln Gln
450

<210> 176
<211> 340
<212> PRT
<213> Homo sapien

<400> 176

Met His Asp Val Lys Asn His Arg Thr Phe Leu Lys Arg Thr Lys Tyr
1 5 10 15

Asp Asn Leu His Leu Glu Asp Leu Phe Ile Gly Asn Lys Val Asn Val
20 25 30

Phe Ser Arg Gln Leu Val Leu Ile Asp Tyr Gly Asp Gln Tyr Thr Ala
35 40 45

Arg Gln Leu Gly Ser Arg Lys Glu Lys Thr Leu Ala Leu Ile Lys Pro
50 55 60

Asp Ala Ile Ser Lys Ala Gly Glu Ile Ile Glu Ile Ile Asn Lys Ala
65 70 75 80

Gly Phe Thr Ile Thr Lys Leu Lys Met Met Leu Ser Arg Lys Glu
85 90 95

Ala Leu Asp Phe His Val Asp His Gln Ser Arg Pro Phe Asn Glu
100 105 110

Leu Ile Gln Phe Ile Thr Thr Gly Pro Ile Ile Ala Met Glu Ile Leu
115 120 125

Arg Asp Asp Ala Ile Cys Glu Trp Lys Arg Leu Leu Gly Pro Ala Asn
130 135 140

Ser Gly Val Ala Arg Thr Asp Ala Ser Glu Ser Ile Arg Ala Leu Phe

230

145	150	155	160
Gly Thr Asp Gly Ile Arg Asn Ala Ala His Gly Pro Asp Ser Phe Ala			
165		170	175
Ser Ala Ala Arg Glu Met Glu Leu Phe Phe Pro Ser Ser Gly Gly Cys			
180		185	190
Gly Pro Ala Asn Thr Ala Lys Phe Thr Asn Cys Thr Cys Cys Ile Val			
195		200	205
Lys Pro His Ala Val Ser Glu Gly Leu Leu Gly Lys Ile Leu Met Ala			
210		215	220
Ile Arg Asp Ala Gly Phe Glu Ile Ser Ala Met Gln Met Phe Asn Met			
225	230	235	240
Asp Arg Val Asn Val Glu Glu Phe Tyr Glu Val Tyr Lys Gly Val Val			
245		250	255
Thr Glu Tyr His Asp Met Val Thr Glu Met Tyr Ser Gly Pro Cys Val			
260		265	270
Ala Met Glu Ile Gln Gln Asn Asn Ala Thr Lys Thr Phe Arg Glu Phe			
275		280	285
Cys Gly Pro Ala Asp Pro Glu Ile Ala Arg His Leu Arg Pro Gly Thr			
290	295	300	
Leu Arg Ala Ile Phe Gly Lys Thr Lys Ile Gln Asn Ala Val His Cys			
305	310	315	320
Thr Asp Leu Pro Glu Asp Gly Leu Leu Glu Val Gln Tyr Phe Phe Lys			
325		330	335
Ile Leu Asp Asn			
340			

<210> 177
<211> 304
<212> PRT
<213> Homo sapien

<220>
<221> MISC_FEATURE
<222> (264)..(264)
<223> X=any amino acid

<400> 177

Thr Gly Pro Val Ala Met Gly Arg Val Ile Arg Gly Gln Arg Lys Gly
1 5 10 15

Ala Gly Ser Val Phe Arg Ala His Val Lys His Arg Lys Gly Ala Ala
20 25 30

Arg Leu Arg Ala Val Asp Phe Ala Glu Arg His Gly Tyr Ile Lys Gly
35 40 45

Ile Val Lys Asp Ile Ile His Asp Pro Gly Arg Gly Ala Pro Leu Ala
50 55 60

Lys Val Val Phe Arg Asp Pro Tyr Arg Phe Lys Lys Arg Thr Glu Leu
65 70 75 80

Phe Ile Ala Ala Glu Gly Ile His Thr Gly Gln Phe Val Tyr Cys Gly
85 90 95

Lys Lys Ala Gln Leu Asn Ile Gly Asn Val Leu Pro Val Gly Thr Met
100 105 110

Pro Glu Gly Thr Ile Val Cys Cys Leu Glu Glu Lys Pro Gly Asp Arg
115 120 125

Gly Lys Leu Ala Arg Ala Ser Gly Asn Tyr Ala Thr Val Ile Ser His
130 135 140

Asn Pro Glu Thr Lys Lys Thr Arg Val Lys Leu Pro Ser Gly Ser Lys
145 150 155 160

Lys Val Ile Ser Ser Ala Asn Arg Ala Val Val Gly Val Val Ala Gly
165 170 175

Gly Gly Arg Ile Asp Lys Pro Ile Leu Lys Ala Gly Arg Ala Tyr His
180 185 190

Lys Tyr Lys Ala Lys Arg Asn Cys Trp Pro Arg Val Arg Gly Val Ala
195 200 205

Met Asn Pro Val Glu His Pro Phe Gly Gly Asn His Gln His Ile
210 215 220

Gly Lys Pro Ser Thr Ile Arg Arg Asp Ala Pro Ala Gly Arg Lys Val
225 230 235 240

232

Gly Leu Ile Ala Ala Arg Arg Thr Gly Arg Leu Arg Gly Thr Lys Thr
245 250 255

Val Gln Glu Asn Met Trp Ala Xaa Ser Gly Phe Ala Glu Lys Asn Thr
260 265 270

Thr Thr Gln Thr Gln Arg Gln Thr Tyr Arg Lys Lys Gly Gly Tyr Arg
275 280 285

Gly Arg His Ser Arg Gly Asn Ile Ile Ala Ala Glu Asp Arg Gly Gly
290 295 300

<210> 178

<211> 185

<212> PRT

<213> Homo sapien

<400> 178

Met Pro Glu Gly Thr Ile Val Cys Cys Leu Glu Glu Lys Pro Gly Asp
1 5 10 15

Arg Gly Lys Leu Ala Arg Ala Ser Gly Asn Tyr Ala Thr Val Ile Ser
20 25 30

His Asn Pro Glu Thr Lys Lys Thr Arg Val Lys Leu Pro Ser Gly Ser
35 40 45

Lys Lys Val Ile Ser Ser Ala Asn Arg Ala Val Val Gly Val Val Ala
50 55 60

Gly Gly Gly Arg Ile Asp Lys Pro Ile Leu Lys Ala Gly Arg Ala Tyr
65 70 75 80

His Lys Tyr Lys Ala Lys Arg Asn Cys Trp Pro Arg Val Arg Gly Val
85 90 95

Ala Met Asn Pro Val Glu His Pro Phe Gly Gly Asn His Gln His
100 105 110

Ile Gly Lys Pro Ser Thr Ile Arg Arg Asp Ala Pro Ala Gly Arg Lys
115 120 125

Val Gly Leu Ile Ala Ala Arg Arg Thr Gly Arg Leu Arg Gly Thr Lys
130 135 140

233

Thr Val Gln Glu Asn Met Trp Ala His Lys Trp Val Cys Arg Glu Lys
145 150 155 160

Thr Gln Gln Arg Lys His Lys Gly Lys His Ile Glu Lys Lys Gly Ala
165 170 175

Thr Gly Ala Asp Thr Leu Glu Val Ile
180 185

<210> 179
<211> 484
<212> PRT
<213> Homo sapien

<400> 179

His Gly Lys Arg Gly Arg His Gly Lys Arg Gly Arg His Gly Met Val
1 5 10 15

Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala
20 25 30

Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala
35 40 45

Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val
50 55 60

Ser Ala Asp Ala Met His Thr Asp Pro Asp Tyr Ser Ala Ala Tyr Val
65 70 75 80

Val Ile Glu Thr Asp Ala Glu Asp Gly Ile Lys Gly Cys Gly Ile Thr
85 90 95

Phe Thr Leu Gly Lys Gly Thr Glu Val Val Val Cys Ala Val Asn Ala
100 105 110

Leu Ala His His Val Leu Asn Lys Asp Leu Lys Asp Ile Val Gly Asp
115 120 125

Phe Arg Gly Phe Tyr Arg Gln Leu Thr Ser Asp Gly Gln Leu Arg Trp
130 135 140

Ile Gly Pro Glu Lys Gly Val Val His Leu Ala Thr Ala Ala Val Leu
145 150 155 160

Asn Ala Val Trp Asp Leu Trp Ala Lys Gln Glu Gly Lys Pro Val Trp
165 170 175

Lys Leu Leu Val Asp Met Asp Pro Arg Met Leu Val Ser Cys Ile Asp
180 185 190

Phe Arg Tyr Ile Thr Asp Val Leu Thr Glu Glu Asp Ala Leu Glu Ile
195 200 205

Leu Gln Lys Gly Gln Ile Gly Lys Lys Glu Arg Glu Lys Gln Met Leu
210 215 220

Ala Gln Gly Tyr Pro Ala Tyr Thr Thr Ser Cys Ala Trp Leu Gly Tyr
225 230 235 240

Ser Asp Asp Thr Leu Lys Gln Leu Cys Ala Gln Ala Leu Lys Asp Gly
245 250 255

Trp Thr Arg Phe Lys Val Lys Val Gly Ala Asp Leu Gln Asp Asp Met
260 265 270

Arg Arg Cys Gln Ile Ile Arg Asp Met Ile Gly Pro Glu Lys Thr Leu
275 280 285

Met Met Asp Ala Asn Gln Arg Trp Asp Val Pro Glu Ala Val Glu Trp
290 295 300

Met Ser Lys Leu Ala Lys Phe Lys Pro Leu Trp Ile Glu Glu Pro Thr
305 310 315 320

Ser Pro Asp Asp Ile Leu Gly His Ala Thr Ile Ser Lys Ala Leu Val
325 330 335

Pro Leu Gly Ile Gly Ile Ala Thr Gly Glu Gln Cys His Asn Arg Val
340 345 350

Ile Phe Lys Gln Leu Leu Gln Ala Lys Ala Leu Gln Phe Leu Gln Ile
355 360 365

Asp Ser Cys Arg Leu Gly Ser Val Asn Glu Asn Leu Ser Val Leu Leu
370 375 380

Met Ala Lys Lys Phe Glu Ile Pro Val Cys Pro His Ala Gly Gly Val
385 390 395 400

Gly Leu Cys Glu Leu Val Gln His Leu Ile Ile Phe Asp Tyr Ile Ser
405 410 415

235

Val Ser Ala Ser Leu Glu Asn Arg Val Cys Glu Tyr Val Asp His Leu
420 425 430

His Glu His Phe Lys Tyr Pro Val Met Ile Gln Arg Ala Ser Tyr Met
435 440 445

Pro Pro Lys Asp Pro Gly Tyr Ser Thr Glu Met Lys Glu Glu Ser Val
450 455 460

Lys Lys His Gln Tyr Pro Asp Gly Glu Val Trp Lys Lys Leu Leu Pro
465 470 475 480

Ala Gln Glu Asn

<210> 180

<211> 483

<212> PRT

<213> Homo sapien

<400> 180

Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Trp Ser
1 5 10 15

Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met
20 25 30

Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp
35 40 45

Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser
50 55 60

Ala Asp Ala Met His Thr Asp Pro Asp Tyr Ser Ala Ala Tyr Val Val
65 70 75 80

Ile Glu Thr Asp Ala Glu Asp Gly Ile Lys Gly Cys Gly Ile Thr Phe
85 90 95

Thr Leu Gly Lys Gly Thr Glu Val Val Cys Ala Val Asn Ala Leu
100 105 110

Ala His His Val Leu Asn Lys Asp Leu Lys Asp Ile Val Gly Asp Phe
115 120 125

Arg Gly Phe Tyr Arg Gln Leu Thr Ser Asp Gly Gln Leu Arg Trp Ile

236

130 135 140

Gly Pro Glu Lys Gly Val Val His Leu Ala Thr Ala Ala Val Leu Asn
145 150 155 160

Ala Val Trp Asp Leu Trp Ala Lys Gln Glu Gly Lys Pro Val Trp Lys
165 170 175

Leu Leu Val Asp Met Asp Pro Arg Met Leu Val Ser Cys Ile Asp Phe
180 185 190

Arg Tyr Ile Thr Asp Val Leu Thr Glu Glu Asp Ala Leu Glu Ile Leu
195 200 205

Gln Lys Gly Gln Ile Gly Lys Lys Glu Arg Glu Lys Gln Met Leu Ala
210 215 220

Gln Gly Tyr Pro Ala Tyr Thr Thr Ser Cys Ala Trp Leu Gly Tyr Ser
225 230 235 240

Asp Asp Thr Leu Lys Gln Leu Cys Ala Gln Ala Leu Lys Asp Gly Trp
245 250 255

Thr Arg Phe Lys Val Lys Val Gly Ala Asp Leu Gln Asp Asp Met Arg
260 265 270

Arg Cys Gln Ile Ile Arg Asp Met Ile Gly Pro Glu Lys Thr Leu Met
275 280 285

Met Asp Ala Asn Gln Arg Trp Asp Val Pro Glu Ala Val Glu Trp Met
290 295 300

Ser Lys Leu Ala Lys Phe Lys Pro Leu Trp Ile Glu Glu Pro Thr Ser
305 310 315 320

Pro Asp Asp Ile Leu Gly His Ala Thr Ile Ser Lys Ala Leu Val Pro
325 330 335

Leu Gly Ile Gly Ile Ala Thr Gly Glu Gln Cys His Asn Arg Val Ile
340 345 350

Phe Lys Gln Leu Leu Gln Ala Lys Ala Leu Gln Phe Leu Gln Ile Asp
355 360 365

Ser Cys Arg Leu Gly Ser Val Asn Glu Asn Leu Ser Val Leu Leu Met
370 375 380

Ala Lys Lys Phe Glu Ile Pro Val Cys Pro His Ala Gly Gly Val Gly
385 390 395 400

Leu Cys Glu Leu Val Gln His Leu Ile Ile Phe Asp Tyr Ile Ser Val
405 410 415

Ser Ala Ser Leu Glu Asn Arg Val Cys Glu Tyr Val Asp His Leu His
420 425 430

Glu His Phe Lys Tyr Pro Val Met Ile Gln Arg Ala Ser Tyr Met Pro
435 440 445

Pro Lys Asp Pro Gly Tyr Ser Thr Glu Met Lys Glu Glu Ser Val Lys
450 455 460

Lys His Gln Tyr Pro Asp Gly Glu Val Trp Lys Lys Leu Leu Pro Ala
465 470 475 480

Gln Glu Asn

<210> 181
<211> 484
<212> PRT
<213> Homo sapien

<400> 181

His Gly Lys Arg Gly Arg His Gly Lys Arg Gly Arg His Gly Met Val
1 5 10 15

Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala
20 25 30

Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala
35 40 45

Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val
50 55 60

Ser Ala Asp Ala Met His Thr Asp Pro Asp Tyr Ser Ala Ala Tyr Val
65 70 75 80

Val Ile Glu Thr Asp Ala Glu Asp Gly Ile Lys Gly Cys Gly Ile Thr
85 90 95

238

Phe Thr Leu Gly Lys Gly Thr Glu Val Val Val Cys Ala Val Asn Ala
100 105 110

Leu Ala His His Val Leu Asn Lys Asp Leu Lys Asp Ile Val Gly Asp
115 120 125

Phe Arg Gly Phe Tyr Arg Gln Leu Thr Ser Asp Gly Gln Leu Arg Trp
130 135 140

Ile Gly Pro Glu Lys Gly Val Val His Leu Ala Thr Ala Ala Val Leu
145 150 155 160

Asn Ala Val Trp Asp Leu Trp Ala Lys Gln Glu Gly Lys Pro Val Trp
165 170 175

Lys Leu Leu Val Asp Met Asp Pro Arg Met Leu Val Ser Cys Ile Asp
180 185 190

Phe Arg Tyr Ile Thr Asp Val Leu Thr Glu Glu Asp Ala Leu Glu Ile
195 200 205

Leu Gln Lys Gly Gln Ile Gly Lys Lys Glu Arg Glu Lys Gln Met Leu
210 215 220

Ala Gln Gly Tyr Pro Ala Tyr Thr Ser Cys Ala Trp Leu Gly Tyr
225 230 235 240

Ser Asp Asp Thr Leu Lys Gln Leu Cys Ala Gln Ala Leu Lys Asp Gly
245 250 255

Trp Thr Arg Phe Lys Val Lys Val Gly Ala Asp Leu Gln Asp Asp Met
260 265 270

Arg Arg Cys Gln Ile Ile Arg Asp Met Ile Gly Pro Glu Lys Thr Leu
275 280 285

Met Met Asp Ala Asn Gln Arg Trp Asp Val Pro Glu Ala Val Glu Trp
290 295 300

Met Ser Lys Leu Ala Lys Phe Lys Pro Leu Trp Ile Glu Glu Pro Thr
305 310 315 320

Ser Pro Asp Asp Ile Leu Gly His Ala Thr Ile Ser Lys Ala Leu Val
325 330 335

Pro Leu Gly Ile Gly Ile Ala Thr Gly Glu Gln Cys His Asn Arg Val

239

340

345

350

Ile Phe Lys Gln Leu Leu Gln Ala Lys Ala Leu Gln Phe Leu Gln Ile
355 360 365

Asp Ser Cys Arg Leu Gly Ser Val Asn Glu Asn Leu Ser Val Leu Leu
370 375 380

Met Ala Lys Lys Phe Glu Ile Pro Val Cys Pro His Ala Gly Gly Val
385 390 395 400

Gly Leu Cys Glu Leu Val Gln His Leu Ile Ile Phe Asp Tyr Ile Ser
405 410 415

Val Ser Ala Ser Leu Glu Asn Arg Val Cys Glu Tyr Val Asp His Leu
420 425 430

His Glu His Phe Lys Tyr Pro Val Met Ile Gln Arg Ala Ser Tyr Met
435 440 445

Pro Pro Lys Asp Pro Gly Tyr Ser Thr Glu Met Lys Glu Glu Ser Val
450 455 460

Lys Lys His Gln Tyr Pro Asp Gly Glu Val Trp Lys Lys Leu Leu Pro
465 470 475 480

Ala Gln Glu Asn

<210> 182
<211> 484
<212> PRT
<213> Homo sapien

<400> 182

His Gly Lys Arg Gly Arg His Gly Lys Arg Gly Arg His Gly Met Val
1 5 10 15

Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala
20 25 30

Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala
35 40 45

Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val
50 55 60

240

Ser Ala Asp Ala Met His Thr Asp Pro Asp Tyr Ser Ala Ala Tyr Val
65 70 75 80

Val Ile Glu Thr Asp Ala Glu Asp Gly Ile Lys Gly Cys Gly Ile Thr
85 90 95

Phe Thr Leu Gly Lys Gly Thr Glu Val Val Val Cys Ala Val Asn Ala
100 105 110

Leu Ala His His Val Leu Asn Lys Asp Leu Lys Asp Ile Val Gly Asp
115 120 125

Phe Arg Gly Phe Tyr Arg Gln Leu Thr Ser Asp Gly Gln Leu Arg Trp
130 135 140

Ile Gly Pro Glu Lys Gly Val Val His Leu Ala Thr Ala Ala Val Leu
145 150 155 160

Asn Ala Val Trp Asp Leu Trp Ala Lys Gln Glu Gly Lys Pro Val Trp
165 170 175

Lys Leu Leu Val Asp Met Asp Pro Arg Met Leu Val Ser Cys Ile Asp
180 185 190

Phe Arg Tyr Ile Thr Asp Val Leu Thr Glu Glu Asp Ala Leu Glu Ile
195 200 205

Leu Gln Lys Gly Gln Ile Gly Lys Glu Arg Glu Lys Gln Met Leu
210 215 220

Ala Gln Gly Tyr Pro Ala Tyr Thr Ser Cys Ala Trp Leu Gly Tyr
225 230 235 240

Ser Asp Asp Thr Leu Lys Gln Leu Cys Ala Gln Ala Leu Lys Asp Gly
245 250 255

Trp Thr Arg Phe Lys Val Lys Val Gly Ala Asp Leu Gln Asp Asp Met
260 265 270

Arg Arg Cys Gln Ile Ile Arg Asp Met Ile Gly Pro Glu Lys Thr Leu
275 280 285

Met Met Asp Ala Asn Gln Arg Trp Asp Val Pro Glu Ala Val Glu Trp
290 295 300

241

Met Ser Lys Leu Ala Lys Phe Lys Pro Leu Trp Ile Glu Glu Pro Thr
305 310 315 320

Ser Pro Asp Asp Ile Leu Gly His Ala Thr Ile Ser Lys Ala Leu Val
325 330 335

Pro Leu Gly Ile Gly Ile Ala Thr Gly Glu Gln Cys His Asn Arg Val
340 345 350

Ile Phe Lys Gln Leu Leu Gln Ala Lys Ala Leu Gln Phe Leu Gln Ile
355 360 365

Asp Ser Cys Arg Leu Gly Ser Val Asn Glu Asn Leu Ser Val Leu Leu
370 375 380

Met Ala Lys Lys Phe Glu Ile Pro Val Cys Pro His Ala Gly Gly Val
385 390 395 400

Gly Leu Cys Glu Leu Val Gln His Leu Ile Ile Phe Asp Tyr Ile Ser
405 410 415

Val Ser Ala Ser Leu Glu Asn Arg Val Cys Glu Tyr Val Asp His Leu
420 425 430

His Glu His Phe Lys Tyr Pro Val Met Ile Gln Arg Ala Ser Tyr Met
435 440 445

Pro Pro Lys Asp Pro Gly Tyr Ser Thr Glu Met Lys Glu Glu Ser Val
450 455 460

Lys Lys His Gln Tyr Pro Asp Gly Glu Val Trp Lys Lys Leu Leu Pro
465 470 475 480

Ala Gln Glu Asn

<210> 183
<211> 249
<212> PRT
<213> Homo sapien

<400> 183

Arg Met Ala Gly Pro Gly Glu Cys Asp Asp Gly Pro Asp Phe Pro Ser
1 5 10 15

Trp Arg Gln Glu Arg Leu Arg Gln Phe Lys Val Lys Val Gly Ala Asp
20 25 30

Leu Gln Asp Asp Met Arg Arg Cys Gln Ile Ile Arg Asp Met Ile Gly
35 40 45

Pro Glu Lys Thr Leu Met Met Asp Ala Asn Gln Arg Trp Asp Val Pro
50 55 60

Glu Ala Val Glu Trp Met Ser Lys Leu Ala Lys Phe Lys Pro Leu Trp
65 70 75 80

Ile Glu Glu Pro Thr Ser Pro Asp Asp Ile Leu Gly His Ala Thr Ile
85 90 95

Ser Lys Ala Leu Val Pro Leu Gly Ile Gly Ile Ala Thr Gly Glu Gln
100 105 110

Cys His Asn Arg Val Ile Phe Lys Gln Leu Leu Gln Ala Lys Ala Leu
115 120 125

Gln Phe Leu Gln Ile Asp Ser Cys Arg Leu Gly Ser Val Asn Glu Asn
130 135 140

Leu Ser Val Leu Leu Met Ala Lys Lys Phe Glu Ile Pro Val Cys Pro
145 150 155 160

His Ala Gly Gly Val Gly Leu Cys Glu Leu Val Gln His Leu Ile Ile
165 170 175

Phe Asp Tyr Ile Ser Val Ser Ala Ser Leu Glu Asn Arg Val Cys Glu
180 185 190

Tyr Val Asp His Leu His Glu His Phe Lys Tyr Pro Val Met Ile Gln
195 200 205

Arg Ala Ser Tyr Met Pro Pro Lys Asp Pro Gly Tyr Ser Thr Glu Met
210 215 220

Lys Glu Glu Ser Val Lys Lys His Gln Tyr Pro Asp Gly Glu Val Trp
225 230 235 240

Lys Lys Leu Leu Pro Ala Gln Glu Asn
245

<210> 184
<211> 221
<212> PRT

243

<213> Homo sapien

<400> 184

Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Trp Ser
1 5 10 15

Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met
20 25 30

Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp
35 40 45

Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser
50 55 60

Ala Asp Ala Met His Thr Asp Pro Asp Tyr Ser Ala Ala Tyr Val Val
65 70 75 80

Ile Glu Thr Asp Ala Glu Asp Gly Ile Lys Gly Cys Gly Ile Thr Phe
85 90 95

Thr Leu Gly Lys Gly Thr Glu Val Val Val Cys Ala Val Asn Ala Leu
100 105 110

Ala His His Val Leu Asn Lys Asp Leu Lys Asp Ile Val Gly Asp Phe
115 120 125

Arg Gly Phe Tyr Arg Gln Leu Thr Ser Asp Gly Gln Leu Arg Trp Ile
130 135 140

Gly Pro Glu Lys Gly Val Val His Leu Ala Thr Ala Ala Val Leu Asn
145 150 155 160

Ala Val Trp Asp Leu Trp Ala Lys Gln Glu Gly Lys Pro Val Trp Lys
165 170 175

Leu Leu Val Asp Met Asp Pro Arg Met Leu Val Ser Cys Ile Asp Phe
180 185 190

Arg Tyr Ile Thr Asp Val Leu Thr Glu Glu Asp Ala Leu Glu Ile Leu
195 200 205

Gln Lys Gly Gln Ile Gly Lys Lys Glu Arg Gly Gly Leu
210 215 220

<210> 185

244

<211> 416

<212> PRT

<213> Homo sapien

<400> 185

His Gly Lys Arg Gly Arg His Gly Lys Arg Gly Arg His Gly Met Val
1 5 10 15

Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala
20 25 30

Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala
35 40 45

Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val
50 55 60

Ser Ala Asp Ala Met His Thr Asp Pro Asp Tyr Ser Ala Ala Tyr Val
65 70 75 80

Val Ile Glu Thr Asp Ala Glu Asp Gly Ile Lys Gly Cys Gly Ile Thr
85 90 95

Phe Thr Leu Gly Lys Gly Thr Glu Val Val Val Cys Ala Val Asn Ala
100 105 110

Leu Ala His His Val Leu Asn Lys Asp Leu Lys Asp Ile Val Gly Asp
115 120 125

Phe Arg Gly Phe Tyr Arg Gln Leu Thr Ser Asp Gly Gln Leu Arg Trp
130 135 140

Ile Gly Pro Glu Lys Gly Val Val His Leu Ala Thr Ala Ala Val Leu
145 150 155 160

Asn Ala Val Trp Asp Leu Trp Ala Lys Gln Glu Gly Lys Pro Val Trp
165 170 175

Lys Leu Leu Val Asp Met Asp Pro Arg Met Leu Val Ser Cys Ile Asp
180 185 190

Phe Arg Tyr Ile Thr Asp Val Leu Thr Glu Glu Asp Ala Leu Glu Ile
195 200 205

Leu Gln Lys Gly Gln Ile Gly Lys Lys Glu Arg Glu Lys Gln Met Leu
210 215 220

245

Ala Gln Gly Tyr Pro Ala Tyr Thr Thr Ser Cys Ala Trp Leu Gly Tyr
225 230 235 240

Ser Asp Asp Thr Leu Lys Gln Leu Cys Ala Gln Ala Leu Lys Asp Gly
245 250 255

Trp Thr Arg Phe Lys Val Lys Val Gly Ala Asp Leu Gln Asp Asp Met
260 265 270

Arg Arg Cys Gln Ile Ile Arg Asp Met Ile Gly Pro Glu Lys Thr Leu
275 280 285

Met Met Asp Ala Asn Gln Arg Trp Asp Val Pro Glu Ala Val Glu Trp
290 295 300

Met Ser Lys Leu Ala Lys Phe Lys Pro Leu Trp Ile Glu Glu Pro Thr
305 310 315 320

Ser Pro Asp Asp Ile Leu Gly His Ala Thr Ile Ser Lys Ala Leu Val
325 330 335

Pro Leu Gly Ile Gly Ile Ala Thr Gly Glu Gln Val Ser Asp Ala Pro
340 345 350

Asn Arg Trp Met Thr Ser Pro Trp Gly Gln Tyr Thr Leu Thr Ser Asp
355 360 365

Arg Gly His Ser Cys Val Leu Gly Ser Ile Thr Cys Cys Thr Leu Ser
370 375 380

Trp Glu Ile Phe Ile Ile Leu Glu Thr Gly Ser Phe Tyr Gln Ser Leu
385 390 395 400

Glu Ser Asp Ile Glu Lys Val Cys Gly Tyr Phe Ser Asn Leu Tyr Asp
405 410 415

<210> 186
<211> 415
<212> PRT
<213> Homo sapien

<400> 186

Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Trp Ser
1 5 10 15

Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met

246

20

25

30

Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp
35 40 45

Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser
50 55 60

Ala Asp Ala Met His Thr Asp Pro Asp Tyr Ser Ala Ala Tyr Val Val
65 70 75 80

Ile Glu Thr Asp Ala Glu Asp Gly Ile Lys Gly Cys Gly Ile Thr Phe
85 90 95

Thr Leu Gly Lys Gly Thr Glu Val Val Val Cys Ala Val Asn Ala Leu
100 105 110

Ala His His Val Leu Asn Lys Asp Leu Lys Asp Ile Val Gly Asp Phe
115 120 125

Arg Gly Phe Tyr Arg Gln Leu Thr Ser Asp Gly Gln Leu Arg Trp Ile
130 135 140

Gly Pro Glu Lys Gly Val Val His Leu Ala Thr Ala Ala Val Leu Asn
145 150 155 160

Ala Val Trp Asp Leu Trp Ala Lys Gln Glu Gly Lys Pro Val Trp Lys
165 170 175

Leu Leu Val Asp Met Asp Pro Arg Met Leu Val Ser Cys Ile Asp Phe
180 185 190

Arg Tyr Ile Thr Asp Val Leu Thr Glu Glu Asp Ala Leu Glu Ile Leu
195 200 205

Gln Lys Gly Gln Ile Gly Lys Lys Glu Arg Glu Lys Gln Met Leu Ala
210 215 220

Gln Gly Tyr Pro Ala Tyr Thr Ser Cys Ala Trp Leu Gly Tyr Ser
225 230 235 240

Asp Asp Thr Leu Lys Gln Leu Cys Ala Gln Ala Leu Lys Asp Gly Trp
245 250 255

Thr Arg Phe Lys Val Lys Val Gly Ala Asp Leu Gln Asp Asp Met Arg
260 265 270

Arg Cys Gln Ile Ile Arg Asp Met Ile Gly Pro Glu Lys Thr Leu Met
275 280 285

Met Asp Ala Asn Gln Arg Trp Asp Val Pro Glu Ala Val Glu Trp Met
290 295 300

Ser Lys Leu Ala Lys Phe Lys Pro Leu Trp Ile Glu Glu Pro Thr Ser
305 310 315 320

Pro Asp Asp Ile Leu Gly His Ala Thr Ile Ser Lys Ala Leu Val Pro
325 330 335

Leu Gly Ile Gly Ile Ala Thr Gly Glu Gln Val Ser Asp Ala Pro Asn
340 345 350

Arg Trp Met Thr Ser Pro Trp Gly Gln Tyr Thr Leu Thr Ser Asp Arg
355 360 365

Gly His Ser Cys Val Leu Gly Ser Ile Thr Cys Cys Thr Leu Ser Trp
370 375 380

Glu Ile Phe Ile Ile Leu Glu Thr Gly Ser Phe Tyr Gln Ser Leu Glu
385 390 395 400

Ser Asp Ile Glu Lys Val Cys Gly Tyr Phe Ser Asn Leu Tyr Asp
405 410 415

<210> 187

<211> 484

<212> PRT

<213> Homo sapien

<400> 187

His Gly Lys Arg Gly Arg His Gly Lys Arg Gly Arg His Gly Met Val
1 5 10 15

Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala
20 25 30

Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala
35 40 45

Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val
50 55 60

248

Ser Ala Asp Ala Met His Thr Asp Pro Asp Tyr Ser Ala Ala Tyr Val
65 70 75 80

Val Ile Glu Thr Asp Ala Glu Asp Gly Ile Lys Gly Cys Gly Ile Thr
85 90 95

Phe Thr Leu Gly Lys Gly Thr Glu Val Val Val Cys Ala Val Asn Ala
100 105 110

Leu Ala His His Val Leu Asn Lys Asp Leu Lys Asp Ile Val Gly Asp
115 120 125

Phe Arg Gly Phe Tyr Arg Gln Leu Thr Ser Asp Gly Gln Leu Arg Trp
130 135 140

Ile Gly Pro Glu Lys Gly Val Val His Leu Ala Thr Ala Ala Val Leu
145 150 155 160

Asn Ala Val Trp Asp Leu Trp Ala Lys Gln Glu Gly Lys Pro Val Trp
165 170 175

Lys Leu Leu Val Asp Met Asp Pro Arg Met Leu Val Ser Cys Ile Asp
180 185 190

Phe Arg Tyr Ile Thr Asp Val Leu Thr Glu Glu Asp Ala Leu Glu Ile
195 200 205

Leu Gln Lys Gly Gln Ile Gly Lys Lys Glu Arg Glu Lys Gln Met Leu
210 215 220

Ala Gln Gly Tyr Pro Ala Tyr Thr Ser Cys Ala Trp Leu Gly Tyr
225 230 235 240

Ser Asp Asp Thr Leu Lys Gln Leu Cys Ala Gln Ala Leu Lys Asp Gly
245 250 255

Trp Thr Arg Phe Lys Val Lys Val Gly Ala Asp Leu Gln Asp Asp Met
260 265 270

Arg Arg Cys Gln Ile Ile Arg Asp Met Ile Gly Pro Glu Lys Thr Leu
275 280 285

Met Met Asp Ala Asn Gln Arg Trp Asp Val Pro Glu Ala Val Glu Trp
290 295 300

Met Ser Lys Leu Ala Lys Phe Lys Pro Leu Trp Ile Glu Glu Pro Thr

249

305 310 315 320

Ser Pro Asp Asp Ile Leu Gly His Ala Thr Ile Ser Lys Ala Leu Val
325 330 335

Pro Leu Gly Ile Gly Ile Ala Thr Gly Glu Gln Cys His Asn Arg Val
340 345 350

Ile Phe Lys Gln Leu Leu Gln Ala Lys Ala Leu Gln Phe Leu Gln Ile
355 360 365

Asp Ser Cys Arg Leu Gly Ser Val Asn Glu Asn Leu Ser Val Leu Leu
370 375 380

Met Ala Lys Lys Phe Glu Ile Pro Val Cys Pro His Ala Gly Gly Val
385 390 395 400

Gly Leu Cys Glu Leu Val Gln His Leu Ile Ile Phe Asp Tyr Ile Ser
405 410 415

Val Ser Ala Ser Leu Glu Asn Arg Val Cys Glu Tyr Val Asp His Leu
420 425 430

His Glu His Phe Lys Tyr Pro Val Met Ile Gln Arg Ala Ser Tyr Met
435 440 445

Pro Pro Lys Asp Pro Gly Tyr Ser Thr Glu Met Lys Glu Glu Ser Val
450 455 460

Lys Lys His Gln Tyr Pro Asp Gly Glu Val Trp Lys Lys Leu Leu Pro
465 470 475 480

Ala Gln Glu Asn

<210> 188
<211> 349
<212> PRT
<213> Homo sapien

<400> 188

His Gly Lys Arg Gly Arg His Gly Lys Arg Gly Arg His Gly Met Val
1 5 10 15

Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala
20 25 30

250

Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala
35 40 45

Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val
50 55 60

Ser Ala Asp Ala Met His Thr Asp Pro Asp Tyr Ser Ala Ala Tyr Val
65 70 75 80

Val Ile Glu Thr Asp Ala Glu Asp Gly Ile Lys Gly Cys Gly Ile Thr
85 90 95

Phe Thr Leu Gly Lys Gly Thr Glu Val Val Val Cys Ala Val Asn Ala
100 105 110

Leu Ala His His Val Leu Asn Lys Asp Leu Lys Asp Ile Val Gly Asp
115 120 125

Phe Arg Gly Phe Tyr Arg Gln Leu Thr Ser Asp Gly Gln Leu Arg Trp
130 135 140

Ile Gly Pro Glu Lys Gly Val Val His Leu Ala Thr Ala Ala Val Leu
145 150 155 160

Asn Ala Val Trp Asp Leu Trp Ala Lys Gln Glu Gly Lys Pro Val Trp
165 170 175

Lys Leu Leu Val Asp Met Asp Pro Arg Met Leu Val Ser Cys Ile Asp
180 185 190

Phe Arg Tyr Ile Thr Asp Val Leu Thr Glu Glu Asp Ala Leu Glu Ile
195 200 205

Leu Gln Lys Gly Gln Ile Gly Lys Glu Arg Glu Lys Gln Met Leu
210 215 220

Ala Gln Gly Tyr Pro Ala Tyr Thr Thr Ser Cys Ala Trp Leu Gly Tyr
225 230 235 240

Ser Asp Asp Thr Leu Lys Gln Leu Cys Ala Gln Ala Leu Lys Asp Gly
245 250 255

Trp Thr Arg Phe Lys Val Lys Val Gly Ala Asp Leu Gln Asp Asp Met
260 265 270

251

Arg Arg Cys Gln Ile Ile Arg Asp Met Ile Gly Pro Glu Lys Thr Leu
275 280 285

Met Met Asp Ala Asn Gln Arg Trp Asp Val Pro Glu Ala Val Glu Trp
290 295 300

Met Ser Lys Leu Ala Lys Phe Lys Pro Leu Trp Ile Glu Glu Pro Thr
305 310 315 320

Ser Pro Asp Asp Ile Leu Gly His Ala Thr Ile Ser Lys Ala Leu Val
325 330 335

Pro Leu Gly Ile Gly Ile Ala Thr Gly Glu Gln Gly Val
340 345

<210> 189

<211> 305

<212> PRT

<213> Homo sapien

<400> 189

Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala
1 5 10 15

Asp Ala Met Val Ser Ala Asp Ala Met His Thr Asp Pro Asp Tyr Ser
20 25 30

Ala Ala Tyr Val Val Ile Glu Thr Asp Ala Glu Asp Gly Ile Lys Gly
35 40 45

Cys Gly Ile Thr Phe Thr Leu Gly Lys Gly Thr Glu Val Val Val Cys
50 55 60

Ala Val Asn Ala Leu Ala His His Val Leu Asn Lys Asp Leu Lys Asp
65 70 75 80

Ile Val Gly Asp Phe Arg Gly Phe Tyr Arg Gln Leu Thr Ser Asp Gly
85 90 95

Gln Leu Arg Trp Ile Gly Pro Glu Lys Gly Val Val His Leu Ala Thr
100 105 110

Ala Ala Val Leu Asn Ala Val Trp Asp Leu Trp Ala Lys Gln Glu Gly
115 120 125

Lys Pro Val Trp Lys Leu Leu Val Asp Met Asp Pro Arg Met Leu Val
130 135 140

252

Ser Cys Ile Asp Phe Arg Tyr Ile Thr Asp Val Leu Thr Glu Glu Asp
145 150 155 160

Ala Leu Glu Ile Leu Gln Lys Gly Gln Ile Gly Lys Lys Glu Arg Glu
165 170 175

Lys Gln Met Leu Ala Gln Gly Tyr Pro Ala Tyr Thr Thr Ser Cys Ala
180 185 190

Trp Leu Gly Tyr Ser Asp Asp Thr Leu Lys Gln Leu Cys Ala Gln Ala
195 200 205

Leu Lys Asp Gly Trp Thr Arg Phe Lys Val Lys Val Gly Ala Asp Leu
210 215 220

Gln Asp Asp Met Arg Arg Cys Gln Ile Ile Arg Asp Met Ile Gly Pro
225 230 235 240

Glu Lys Thr Leu Met Met Asp Ala Asn Gln Arg Trp Asp Val Pro Glu
245 250 255

Ala Val Glu Trp Met Ser Lys Leu Ala Lys Phe Lys Pro Leu Trp Ile
260 265 270

Glu Glu Pro Thr Ser Pro Asp Asp Ile Leu Gly His Ala Thr Ile Ser
275 280 285

Lys Ala Leu Val Pro Leu Gly Ile Gly Ile Ala Thr Gly Glu Gln Gly
290 295 300

Val
305

<210> 190
<211> 484
<212> PRT
<213> Homo sapien

<400> 190

His Gly Lys Arg Gly Arg His Gly Lys Arg Gly Arg His Gly Met Val
1 5 10 15

Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala
20 25 30

253

Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala
35 40 45

Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val
50 55 60

Ser Ala Asp Ala Met His Thr Asp Pro Asp Tyr Ser Ala Ala Tyr Val
65 70 75 80

Val Ile Glu Thr Asp Ala Glu Asp Gly Ile Lys Gly Cys Gly Ile Thr
85 90 95

Phe Thr Leu Gly Lys Gly Thr Glu Val Val Val Cys Ala Val Asn Ala
100 105 110

Leu Ala His His Val Leu Asn Lys Asp Leu Lys Asp Ile Val Gly Asp
115 120 125

Phe Arg Gly Phe Tyr Arg Gln Leu Thr Ser Asp Gly Gln Leu Arg Trp
130 135 140

Ile Gly Pro Glu Lys Gly Val Val His Leu Ala Thr Ala Ala Val Leu
145 150 155 160

Asn Ala Val Trp Asp Leu Trp Ala Lys Gln Glu Gly Lys Pro Val Trp
165 170 175

Lys Leu Leu Val Asp Met Asp Pro Arg Met Leu Val Ser Cys Ile Asp
180 185 190

Phe Arg Tyr Ile Thr Asp Val Leu Thr Glu Asp Ala Leu Glu Ile
195 200 205

Leu Gln Lys Gly Gln Ile Gly Lys Glu Arg Glu Lys Gln Met Leu
210 215 220

Ala Gln Gly Tyr Pro Ala Tyr Thr Ser Cys Ala Trp Leu Gly Tyr
225 230 235 240

Ser Asp Asp Thr Leu Lys Gln Leu Cys Ala Gln Ala Leu Lys Asp Gly
245 250 255

Trp Thr Arg Phe Lys Val Lys Val Gly Ala Asp Leu Gln Asp Asp Met
260 265 270

Arg Arg Cys Gln Ile Ile Arg Asp Met Ile Gly Pro Glu Lys Thr Leu

254

275

280

285

Met Met Asp Ala Asn Gln Arg Trp Asp Val Pro Glu Ala Val Glu Trp
290 295 300

Met Ser Lys Leu Ala Lys Phe Lys Pro Leu Trp Ile Glu Glu Pro Thr
305 310 315 320

Ser Pro Asp Asp Ile Leu Gly His Ala Thr Ile Ser Lys Ala Leu Val
325 330 335

Pro Leu Gly Ile Gly Ile Ala Thr Gly Glu Gln Cys His Asn Arg Val
340 345 350

Ile Phe Lys Gln Leu Leu Gln Ala Lys Ala Leu Gln Phe Leu Gln Ile
355 360 365

Asp Ser Cys Arg Leu Gly Ser Val Asn Glu Asn Leu Ser Val Leu Leu
370 375 380

Met Ala Lys Lys Phe Glu Ile Pro Val Cys Pro His Ala Gly Gly Val
385 390 395 400

Gly Leu Cys Glu Leu Val Gln His Leu Ile Ile Phe Asp Tyr Ile Ser
405 410 415

Val Ser Ala Ser Leu Glu Asn Arg Val Cys Glu Tyr Val Asp His Leu
420 425 430

His Glu His Phe Lys Tyr Pro Val Met Ile Gln Arg Ala Ser Tyr Met
435 440 445

Pro Pro Lys Asp Pro Gly Tyr Ser Thr Glu Met Lys Glu Glu Ser Val
450 455 460

Lys Lys His Gln Tyr Pro Asp Gly Glu Val Trp Lys Lys Leu Leu Pro
465 470 475 480

Ala Gln Glu Asn

<210> 191
<211> 484
<212> PRT
<213> Homo sapien

<400> 191

255

His Gly Lys Arg Gly Arg His Gly Lys Arg Gly Arg His Gly Met Val
1 5 10 15

Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala
20 25 30

Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala
35 40 45

Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val
50 55 60

Ser Ala Asp Ala Met His Thr Asp Pro Asp Tyr Ser Ala Ala Tyr Val
65 70 75 80

Val Ile Glu Thr Asp Ala Glu Asp Gly Ile Lys Gly Cys Gly Ile Thr
85 90 95

Phe Thr Leu Gly Lys Gly Thr Glu Val Val Val Cys Ala Val Asn Ala
100 105 110

Leu Ala His His Val Leu Asn Lys Asp Leu Lys Asp Ile Val Gly Asp
115 120 125

Phe Arg Gly Phe Tyr Arg Gln Leu Thr Ser Asp Gly Gln Leu Arg Trp
130 135 140

Ile Gly Pro Glu Lys Gly Val Val His Leu Ala Thr Ala Ala Val Leu
145 150 155 160

Asn Ala Val Trp Asp Leu Trp Ala Lys Gln Glu Gly Lys Pro Val Trp
165 170 175

Lys Leu Leu Val Asp Met Asp Pro Arg Met Leu Val Ser Cys Ile Asp
180 185 190

Phe Arg Tyr Ile Thr Asp Val Leu Thr Glu Glu Asp Ala Leu Glu Ile
195 200 205

Leu Gln Lys Gly Gln Ile Gly Lys Lys Glu Arg Glu Lys Gln Met Leu
210 215 220

Ala Gln Gly Tyr Pro Ala Tyr Thr Thr Ser Cys Ala Trp Leu Gly Tyr
225 230 235 240

256

Ser Asp Asp Thr Leu Lys Gln Leu Cys Ala Gln Ala Leu Lys Asp Gly
245 250 255

Trp Thr Arg Phe Lys Val Lys Val Gly Ala Asp Leu Gln Asp Asp Met
260 265 270

Arg Arg Cys Gln Ile Ile Arg Asp Met Ile Gly Pro Glu Lys Thr Leu
275 280 285

Met Met Asp Ala Asn Gln Arg Trp Asp Val Pro Glu Ala Val Glu Trp
290 295 300

Met Ser Lys Leu Ala Lys Phe Lys Pro Leu Trp Ile Glu Glu Pro Thr
305 310 315 320

Ser Pro Asp Asp Ile Leu Gly His Ala Thr Ile Ser Lys Ala Leu Val
325 330 335

Pro Leu Gly Ile Gly Ile Ala Thr Gly Glu Gln Cys His Asn Arg Val
340 345 350

Ile Phe Lys Gln Leu Leu Gln Ala Lys Ala Leu Gln Phe Leu Gln Ile
355 360 365

Asp Ser Cys Arg Leu Gly Ser Val Asn Glu Asn Leu Ser Val Leu Leu
370 375 380

Met Ala Lys Lys Phe Glu Ile Pro Val Cys Pro His Ala Gly Gly Val
385 390 395 400

Gly Leu Cys Glu Leu Val Gln His Leu Ile Ile Phe Asp Tyr Ile Ser
405 410 415

Val Ser Ala Ser Leu Glu Asn Arg Val Cys Glu Tyr Val Asp His Leu
420 425 430

His Glu His Phe Lys Tyr Pro Val Met Ile Gln Arg Ala Ser Tyr Met
435 440 445

Pro Pro Lys Asp Pro Gly Tyr Ser Thr Glu Met Lys Glu Glu Ser Val
450 455 460

Lys Lys His Gln Tyr Pro Asp Gly Glu Val Trp Lys Lys Leu Leu Pro
465 470 475 480

Ala Gln Glu Asn

<210> 192
<211> 484
<212> PRT
<213> Homo sapien

<400> 192

His Gly Lys Arg Gly Arg His Gly Lys Arg Gly Arg His Gly Met Val
1 5 10 15

Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala
20 25 30

Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala
35 40 45

Asp Ala Met Val Ser Ala Asp Ala Met Val Ser Ala Asp Ala Met Val
50 55 60

Ser Ala Asp Ala Met His Thr Asp Pro Asp Tyr Ser Ala Ala Tyr Val
65 70 75 80

Val Ile Glu Thr Asp Ala Glu Asp Gly Ile Lys Gly Cys Gly Ile Thr
85 90 95

Phe Thr Leu Gly Lys Gly Thr Glu Val Val Val Cys Ala Val Asn Ala
100 105 110

Leu Ala His His Val Leu Asn Lys Asp Leu Lys Asp Ile Val Gly Asp
115 120 125

Phe Arg Gly Phe Tyr Arg Gln Leu Thr Ser Asp Gly Gln Leu Arg Trp
130 135 140

Ile Gly Pro Glu Lys Gly Val Val His Leu Ala Thr Ala Ala Val Leu
145 150 155 160

Asn Ala Val Trp Asp Leu Trp Ala Lys Gln Glu Gly Lys Pro Val Trp
165 170 175

Lys Leu Leu Val Asp Met Asp Pro Arg Met Leu Val Ser Cys Ile Asp
180 185 190

Phe Arg Tyr Ile Thr Asp Val Leu Thr Glu Glu Asp Ala Leu Glu Ile
195 200 205

258

Leu Gln Lys Gly Gln Ile Gly Lys Lys Glu Arg Glu Lys Gln Met Leu
210 215 220

Ala Gln Gly Tyr Pro Ala Tyr Thr Thr Ser Cys Ala Trp Leu Gly Tyr
225 230 235 240

Ser Asp Asp Thr Leu Lys Gln Leu Cys Ala Gln Ala Leu Lys Asp Gly
245 250 255

Trp Thr Arg Phe Lys Val Lys Val Gly Ala Asp Leu Gln Asp Asp Met
260 265 270

Arg Arg Cys Gln Ile Ile Arg Asp Met Ile Gly Pro Glu Lys Thr Leu
275 280 285

Met Met Asp Ala Asn Gln Arg Trp Asp Val Pro Glu Ala Val Glu Trp
290 295 300

Met Ser Lys Leu Ala Lys Phe Lys Pro Leu Trp Ile Glu Glu Pro Thr
305 310 315 320

Ser Pro Asp Asp Ile Leu Gly His Ala Thr Ile Ser Lys Ala Leu Val
325 330 335

Pro Leu Gly Ile Gly Ile Ala Thr Gly Glu Gln Cys His Asn Arg Val
340 345 350

Ile Phe Lys Gln Leu Leu Gln Ala Lys Ala Leu Gln Phe Leu Gln Ile
355 360 365

Asp Ser Cys Arg Leu Gly Ser Val Asn Glu Asn Leu Ser Val Leu Leu
370 375 380

Met Ala Lys Lys Phe Glu Ile Pro Val Cys Pro His Ala Gly Gly Val
385 390 395 400

Gly Leu Cys Glu Leu Val Gln His Leu Ile Ile Phe Asp Tyr Ile Ser
405 410 415

Val Ser Ala Ser Leu Glu Asn Arg Val Cys Glu Tyr Val Asp His Leu
420 425 430

His Glu His Phe Lys Tyr Pro Val Met Ile Gln Arg Ala Ser Tyr Met
435 440 445

259

Pro Pro Lys Asp Pro Gly Tyr Ser Thr Glu Met Lys Glu Glu Ser Val
450 455 460

Lys Lys His Gln Tyr Pro Asp Gly Glu Val Trp Lys Lys Leu Leu Pro
465 470 475 480

Ala Gln Glu Asn

<210> 193
<211> 138
<212> PRT
<213> Homo sapien

<400> 193

Trp Ile Val Val Ala Ala Arg Tyr Arg Ile Arg Leu Gly Leu Tyr Leu
1 5 10 15

Thr Leu Ala Ser Glu Val Tyr Tyr Thr Arg Leu Gly Asn Asp Phe His
20 25 30

Thr Asn Lys Arg Val Cys Glu Glu Ile Ala Ile Ile Pro Ser Lys Lys
35 40 45

Leu Arg Asn Lys Ile Ala Gly Tyr Val Thr His Leu Met Lys Arg Ile
50 55 60

Gln Arg Gly Pro Val Arg Gly Ile Ser Ile Lys Leu Gln Glu Glu Glu
65 70 75 80

Arg Glu Arg Arg Asp Asn Tyr Val Pro Glu Val Ser Ala Leu Asp Gln
85 90 95

Glu Ile Ile Glu Val Asp Pro Asp Thr Lys Glu Met Leu Lys Leu Leu
100 105 110

Asp Phe Gly Ser Leu Ser Asn Leu Gln Val Thr Gln Pro Thr Val Gly
115 120 125

Met Asn Phe Lys Thr Pro Arg Gly Pro Val
130 135

<210> 194
<211> 386
<212> PRT
<213> Homo sapien

<400> 194

260

Met Pro Trp Ala Met Ile Trp Asp Phe Thr Glu Pro Val Cys Arg Gly
1 5 10 15

Cys Val Asn Tyr Glu Gly Ala Asp Arg Val Glu Phe Val Ile Glu Thr
20 25 30

Ala Arg Gln Leu Lys Arg Ala His Gly Cys Phe Pro Glu Gly Arg Ser
35 40 45

Pro Pro Gly Ala Ala Ala Ser Ala Ala Ala Lys Pro Pro Pro Leu Ser
50 55 60

Ala Lys Asp Ile Leu Leu Gln Gln Gln Gln Leu Gly His Gly Gly
65 70 75 80

Pro Glu Ala Ala Pro Arg Ala Pro Gln Ala Leu Glu Arg Tyr Pro Leu
85 90 95

Ala Ala Ala Ala Glu Arg Pro Pro Arg Leu Gly Ser Asp Phe Gly Ser
100 105 110

Ser Arg Pro Ala Ala Ser Leu Ala Gln Pro Pro Thr Pro Gln Pro Pro
115 120 125

Pro Val Asn Gly Ile Leu Val Pro Asn Gly Phe Ser Lys Leu Glu Glu
130 135 140

Pro Pro Glu Leu Asn Arg Gln Ser Pro Asn Pro Arg Arg Gly His Ala
145 150 155 160

Val Pro Pro Thr Leu Val Pro Leu Met Asn Gly Ser Ala Thr Pro Leu
165 170 175

Pro Thr Ala Leu Gly Leu Gly Arg Ala Ala Ala Ser Leu Ala Ala
180 185 190

Val Ser Gly Thr Ala Ala Ala Ser Leu Gly Ser Ala Gln Pro Thr Asp
195 200 205

Leu Gly Ala His Lys Arg Pro Ala Ser Val Ser Ser Ser Ala Ala Val
210 215 220

Glu His Glu Gln Arg Glu Ala Ala Ala Lys Glu Lys Gln Pro Pro Pro
225 230 235 240

261

Pro Ala His Arg Gly Pro Ala Asp Ser Leu Ser Thr Ala Ala Gly Ala
245 250 255

Ala Glu Leu Ser Ala Glu Gly Ala Gly Lys Ser Arg Gly Ser Gly Glu
260 265 270

Gln Asp Trp Val Asn Arg Pro Lys Thr Val Arg Asp Thr Leu Leu Ala
275 280 285

Leu His Gln His Gly His Ser Gly Pro Phe Glu Ser Lys Phe Lys Lys
290 295 300

Glu Pro Ala Leu Thr Ala Gly Arg Leu Leu Gly Phe Glu Ala Asn Gly
305 310 315 320

Ala Asn Gly Ser Lys Ala Gly Arg Gly Cys Glu Val Arg Gly Ser
325 330 335

Arg Gly Glu Lys Gly Thr Glu Ser Arg Gly Arg Val Val Leu Trp Ile
340 345 350

His His Phe Thr Pro Ala Gln Lys Gln Gln Thr Pro His Phe Leu Ile
355 360 365

Cys Leu Arg Arg Asn Gln Cys Leu Val Ala Thr Cys Ser Cys Ala Glu
370 375 380

Ala Ala
385

<210> 195
<211> 492
<212> PRT
<213> Homo sapien

<400> 195

Met Pro Trp Ala Met Ile Trp Asp Phe Thr Glu Pro Val Cys Arg Gly
1 5 10 15

Cys Val Asn Tyr Glu Gly Ala Asp Arg Val Glu Phe Val Ile Glu Thr
20 25 30

Ala Arg Gln Leu Lys Arg Ala His Gly Cys Phe Pro Glu Gly Arg Ser
35 40 45

Pro Pro Gly Ala Ala Ala Ser Ala Ala Lys Pro Pro Pro Leu Ser
50 55 60

Ala Lys Asp Ile Leu Leu Gln Gln Gln Gln Leu Gly His Gly Gly
65 70 75 80

Pro Glu Ala Ala Pro Arg Ala Pro Gln Ala Leu Glu Arg Tyr Pro Leu
85 90 95

Ala Ala Ala Ala Glu Arg Pro Pro Arg Leu Gly Ser Asp Phe Gly Ser
100 105 110

Ser Arg Pro Ala Ala Ser Leu Ala Gln Pro Pro Thr Pro Gln Pro Pro
115 120 125

Pro Val Asn Gly Ile Leu Val Pro Asn Gly Phe Ser Lys Leu Glu Glu
130 135 140

Pro Pro Glu Leu Asn Arg Gln Ser Pro Asn Pro Arg Arg Gly His Ala
145 150 155 160

Val Pro Pro Thr Leu Val Pro Leu Met Asn Gly Ser Ala Thr Pro Leu
165 170 175

Pro Thr Ala Leu Gly Leu Gly Gly Arg Ala Ala Ala Ser Leu Ala Ala
180 185 190

Val Ser Gly Thr Ala Ala Ala Ser Leu Gly Ser Ala Gln Pro Thr Asp
195 200 205

Leu Gly Ala His Lys Arg Pro Ala Ser Val Ser Ser Ala Ala Val
210 215 220

Glu His Glu Gln Arg Glu Ala Ala Ala Lys Glu Lys Gln Pro Pro Pro
225 230 235 240

Pro Ala His Arg Gly Pro Ala Asp Ser Leu Ser Thr Ala Ala Gly Ala
245 250 255

Ala Glu Leu Ser Ala Glu Gly Ala Gly Lys Ser Arg Gly Ser Gly Glu
260 265 270

Gln Asp Trp Val Asn Arg Pro Lys Thr Val Arg Asp Thr Leu Leu Ala
275 280 285

Leu His Gln His Gly His Ser Gly Pro Phe Glu Ser Lys Phe Lys Lys
290 295 300

263

Glu Pro Ala Leu Thr Ala Val Ala Arg Thr Ala Arg Lys Arg Lys Pro
305 310 315 320

Ser Pro Glu Pro Glu Gly Glu Val Gly Pro Pro Lys Ile Asn Gly Glu
325 330 335

Ala Gln Pro Trp Leu Ser Thr Ser Thr Glu Gly Leu Lys Ile Pro Met
340 345 350

Thr Pro Thr Ser Ser Phe Val Ser Pro Pro Pro Pro Thr Ala Ser Pro
355 360 365

His Ser Asn Arg Thr Thr Pro Pro Glu Ala Ala Gln Asn Gly Gln Ser
370 375 380

Pro Met Ala Ala Leu Ile Leu Val Ala Asp Asn Ala Gly Gly Ser His
385 390 395 400

Ala Ser Lys Asp Ala Asn Gln Val His Pro Leu Trp Gln Pro Val Pro
405 410 415

Arg Cys Ala Ala Pro Ser Ala Thr Ser Gly Trp Arg Thr Pro Ile Leu
420 425 430

Cys Ser Ala Arg Pro Ser Leu Arg Thr Ser Ser Ala Ser Leu Ala Pro
435 440 445

Asp Lys Ala Ser Asn Ser Arg Glu Leu Val Glu Arg Ser Ile Val Pro
450 455 460

Val Gly Lys Asn Ala Leu Leu Trp Ala Pro Met Ser Pro Gly Pro Leu
465 470 475 480

Cys Lys Gly Lys Leu Gln Pro Ser Leu Leu Glu Met
485 490

<210> 196
<211> 358
<212> PRT
<213> Homo sapien

<400> 196

Met Ser Gly Val Arg Pro Pro Ile Met Asn Gly Pro Leu His Pro Arg
1 .5 10 15

Pro Leu Val Ala Leu Leu Asp Gly Arg Asp Cys Thr Val Glu Met Pro

264

20 25 30

Ile Leu Lys Asp Val Ala Thr Val Ala Phe Cys Asp Ala Gln Ser Thr
35 40 45

Gln Glu Ile His Glu Lys Val Leu Asn Glu Ala Val Gly Ala Leu Met
50 55 60

Tyr His Thr Ile Thr Leu Thr Arg Glu Asp Leu Glu Lys Phe Lys Ala
65 70 75 80

Leu Arg Ile Ile Val Arg Ile Gly Ser Gly Phe Asp Asn Ile Asp Ile
85 90 95

Lys Ser Ala Gly Asp Leu Gly Ile Ala Val Cys Asn Val Pro Ala Ala
100 105 110

Ser Val Glu Glu Thr Ala Asp Ser Thr Leu Cys His Ile Leu Asn Leu
115 120 125

Tyr Arg Arg Ala Thr Trp Leu His Gln Ala Leu Arg Glu Gly Thr Arg
130 135 140

Val Gln Ser Val Glu Gln Ile Arg Glu Val Ala Ser Gly Ala Ala Arg
145 150 155 160

Ile Arg Gly Glu Thr Leu Gly Ile Ile Gly Leu Gly Arg Val Gly Gln
165 170 175

Ala Val Ala Leu Arg Ala Lys Ala Phe Gly Phe Asn Val Leu Phe Tyr
180 185 190

Asp Pro Tyr Leu Ser Asp Gly Val Glu Arg Ala Leu Gly Leu Gln Arg
195 200 205

Val Ser Thr Leu Gln Asp Leu Leu Phe His Ser Asp Cys Val Thr Leu
210 215 220

His Cys Gly Leu Asn Glu His Asn His His Leu Ile Asn Asp Phe Thr
225 230 235 240

Val Lys Gln Met Arg Gln Gly Ala Phe Leu Val Asn Thr Ala Arg Gly
245 250 255

Gly Leu Val Asp Glu Lys Ala Leu Ala Gln Ala Leu Lys Glu Gly Arg
260 265 270

265

Ile Arg Gly Ala Ala Leu Asp Val His Glu Ser Glu Pro Phe Ser Phe
275 280 285

Ser Gln Gly Pro Leu Lys Asp Ala Pro Asn Leu Ile Cys Thr Pro His
290 295 300

Ala Ala Trp Tyr Ser Glu Gln Ala Ser Ile Glu Met Arg Glu Glu Ala
305 310 320

Ala Arg Glu Ile Arg Arg Ala Ile Thr Gly Arg Ile Pro Asp Ser Leu
325 330 335

Lys Asn Phe Cys Pro Val Ser Phe Ala Phe Leu Val Lys Gln Lys Lys
340 345 350

Ser Val Val Ile Leu Pro
355

<210> 197

<211> 364

<212> PRT

<213> Homo sapien

<400> 197

Met Gly Pro Gly His Gly Val Met Ala Ser Arg Pro Asp Leu Gln Pro
1 5 10 15

Leu Gln His Leu Gly Thr Pro Gly Ser Pro Gly Leu Asp Val Gln Pro
20 25 30

Gln Glu Glu Thr Pro Pro Gln Gly Gln Tyr Gln Pro Ala Ala Pro Gly
35 40 45

Ala Thr Asp Pro Leu Ala Gly Arg Gly Gln Ala Ala Cys Pro Pro Ile
50 55 60

Arg Ala Pro Pro Thr Arg Asp Leu Glu Ile Lys Ser Leu Gly Leu Pro
65 70 75 80

His Pro Pro Leu Ser Gly Ala Pro Gly Val Ser Asp Gly Pro Gly Ala
85 90 95

Val Leu Leu Ser Ser Ala Ser Leu Pro Ser Arg Ala Gly Pro Trp Gly
100 105 110

266

Leu Trp Phe Pro Gly Arg Ala Pro His Arg Gly Phe Gln Cys Gln Pro
115 120 125

Pro Pro Leu Arg Thr Gln Pro Gln His Ser Gly Cys Thr Asp His Ala
130 135 140

Cys Ala Val Pro Ser Phe Ser Gln Gly Pro Leu Lys Asp Ala Pro Asn
145 150 155 160

Leu Ile Cys Thr Pro His Ala Ala Trp Tyr Ser Glu Gln Ala Ser Ile
165 170 175

Glu Met Arg Glu Glu Ala Ala Arg Glu Ile Arg Arg Ala Ile Thr Gly
180 185 190

Arg Ile Pro Asp Ser Leu Lys Asn Cys Val Asn Lys Asp His Leu Thr
195 200 205

Ala Ala Thr His Trp Ala Ser Met Asp Pro Ala Val Val His Pro Glu
210 215 220

Leu Asn Gly Ala Ala Tyr Ser Arg Gly Thr Leu Arg Ala Trp Trp Ala
225 230 235 240

Trp Pro Pro Leu Ala Ser Gln Leu Leu Trp Lys Val Ser Ser Pro Ala
245 250 255

Pro Cys Pro Cys Pro Thr Ala Cys Pro Leu Trp Pro Thr Arg Pro Thr
260 265 270

Pro Leu Leu Leu Ala Lys Pro Ser Ser Pro Arg Arg Ile Glu Thr Thr
275 280 285

Pro Val Thr Ser Cys Ser Pro Gly Gly Ala Leu Gln Pro Arg Arg Leu
290 295 300

Gly Arg Gly Pro Gly Asn Pro Arg Thr Arg Val Cys Gly Gly Gly Ile
305 310 315 320

Cys Val Val Ala Leu Ala Leu Gln Arg Leu Val Arg Ala Val Arg Arg
325 330 335

Arg Glu Gly Ala Ala Leu Gly Leu Val Ser Leu Val Val Val Arg Pro
340 345 350

Val Gly Ala Leu Pro Cys Val Leu Arg Val Pro Arg

267

355

360

<210> 198
<211> 192
<212> PRT
<213> Homo sapien

<400> 198

Ala Gln Pro Ala Cys Arg Ala Glu Arg Gly Arg Gly Val Cys Gly Ser
1 5 10 15

Gln Ala Gly Pro Pro Thr Gly Gly Ser Ser Ala Gln Pro Pro Pro Leu
20 25 30

Arg Thr Gln Pro Gln His Ser Gly Cys Thr Asp His Ala Cys Ala Val
35 40 45

Pro Ser Phe Ser Gln Gly Pro Leu Lys Asp Ala Pro Asn Leu Ile Cys
50 55 60

Thr Pro His Ala Ala Trp Tyr Ser Glu Gln Ala Ser Ile Glu Met Arg
65 70 75 80

Glu Glu Ala Ala Arg Glu Ile Arg Arg Ala Ile Thr Gly Arg Ile Pro
85 90 95

Asp Ser Leu Lys Asn Cys Val Asn Lys Asp His Leu Thr Ala Ala Thr
100 105 110

His Trp Ala Ser Met Asp Pro Ala Val Val His Pro Glu Leu Asn Gly
115 120 125

Ala Ala Tyr Arg Tyr Pro Pro Gly Val Val Gly Val Ala Pro Thr Gly
130 135 140

Ile Pro Ala Ala Val Glu Gly Ile Val Pro Ser Ala Met Ser Leu Ser
145 150 155 160

His Gly Leu Pro Pro Val Ala His Pro Pro His Ala Pro Ser Pro Gly
165 170 175

Gln Thr Val Lys Pro Glu Ala Asp Arg Asp His Ala Ser Asp Gln Leu
180 185 190

<210> 199
<211> 178
<212> PRT

268

<213> Homo sapien

<400> 199

Met Arg Glu Glu Ala Pro Phe Ser Phe Ser Gln Gly Pro Leu Lys Asp
1 5 10 15

Ala Pro Asn Leu Ile Cys Thr Pro His Ala Ala Trp Tyr Met Asp Pro
20 25 30

Ala Val Val His Pro Glu Leu Asn Gly Ala Ala Tyr Ser Arg Gly Thr
35 40 45

Leu Arg Ala Trp Trp Ala Trp Pro Pro Leu Ala Ser Gln Leu Leu Trp
50 55 60

Lys Val Ser Ser Pro Ala Pro Cys Pro Cys Pro Thr Ala Cys Pro Leu
65 70 75 80

Trp Pro Thr Arg Pro Thr Pro Leu Leu Ala Lys Pro Ser Ser Pro
85 90 95

Arg Arg Ile Glu Thr Thr Pro Val Thr Ser Cys Ser Pro Gly Gly Ala
100 105 110

Leu Gln Pro Arg Arg Leu Gly Arg Gly Pro Gly Asn Pro Arg Thr Arg
115 120 125

Val Cys Gly Gly Ile Cys Val Val Ala Leu Ala Leu Gln Arg Leu
130 135 140

Val Arg Ala Val Arg Arg Arg Glu Gly Ala Ala Leu Gly Leu Val Ser
145 150 155 160

Leu Val Val Val Arg Pro Val Gly Ala Leu Pro Cys Val Leu Arg Val
165 170 175

Pro Arg

<210> 200
<211> 162
<212> PRT
<213> Homo sapien

<400> 200

Arg Met His Pro Thr Ser Ser Ala Pro Pro Met Leu His Gly Thr Trp
1 5 10 15

Thr Pro Pro Ser Cys Thr Leu Ser Ser Met Gly Leu Pro Ile Gly Thr
20 25 30

Leu Arg Ala Trp Trp Ala Trp Pro Pro Leu Ala Ser Gln Leu Leu Trp
35 40 45

Lys Val Ser Ser Pro Ala Pro Cys Pro Cys Pro Thr Ala Cys Pro Leu
50 55 60

Trp Pro Thr Arg Pro Thr Pro Leu Leu Ala Lys Pro Ser Ser Pro
65 70 75 80

Arg Arg Ile Glu Thr Thr Pro Val Thr Ser Cys Ser Pro Gly Gly Ala
85 90 95

Leu Gln Pro Arg Arg Leu Gly Arg Gly Pro Gly Asn Pro Arg Thr Arg
100 105 110

Val Cys Gly Gly Ile Cys Val Val Ala Leu Ala Leu Gln Arg Leu
115 120 125

Val Arg Ala Val Arg Arg Glu Gly Ala Ala Leu Gly Leu Val Ser
130 135 140

Leu Val Val Val Arg Pro Val Gly Ala Leu Pro Cys Val Leu Arg Val
145 150 155 160

Pro Arg

<210> 201
<211> 272
<212> PRT
<213> Homo sapien

<400> 201

Ala Ser Cys Gly Val Gly Arg Leu Val Gly Trp Gly Ile Ser Gly Gly
1 5 10 15

Gly Ala Ser Leu Gly Pro Gly His Leu Gly Gly Ala Ser Trp Gly
20 25 30

Arg Gly Ile Ser Glu Gly Ala Ser Gly Gly Trp Ser Ile Leu Gly Gly
35 40 45

270

Gly Ser Arg Trp Gln Arg Gly Phe Pro Gln Leu Ala Gly Gly Val Ile
50 55 60

Leu Gly Val Ala Leu Trp Leu Arg His Asp Pro Gln Thr Thr Asn Leu
65 70 75 80

Leu Tyr Leu Glu Leu Gly Asp Lys Pro Ala Pro Asn Thr Phe Tyr Val
85 90 95

Gly Ile Tyr Ile Leu Ile Ala Val Gly Ala Val Met Met Phe Val Gly
100 105 110

Phe Leu Gly Cys Tyr Gly Ala Ile Gln Glu Ser Gln Cys Leu Leu Gly
115 120 125

Thr Phe Phe Thr Cys Leu Val Ile Leu Phe Ala Cys Glu Val Ala Ala
130 135 140

Gly Ile Trp Gly Phe Val Asn Lys Asp Gln Ile Ala Lys Asp Val Lys
145 150 155 160

Gln Phe Tyr Asp Gln Ala Leu Gln Gln Ala Val Val Asp Asp Asp Ala
165 170 175

Asn Asn Ala Lys Ala Val Val Lys Thr Phe His Glu Thr Leu Asp Cys
180 185 190

Cys Gly Ser Ser Thr Leu Thr Ala Leu Thr Thr Ser Val Leu Lys Asn
195 200 205

Asn Leu Cys Pro Ser Gly Ser Asn Ile Ile Ser Asn Leu Phe Lys Glu
210 215 220

Asp Cys His Gln Lys Ile Asp Asp Leu Phe Ser Gly Lys Leu Tyr Leu
225 230 235 240

Ile Gly Ile Ala Ala Ile Val Val Ala Val Ile Met Ile Phe Glu Met
245 250 255

Ile Leu Ser Met Val Leu Cys Cys Gly Ile Arg Asn Ser Ser Val Tyr
260 265 270

<210> 202
<211> 303
<212> PRT
<213> Homo sapien

271

<400> 202

Met Ser Gly Ala Val Thr Ser His Leu Pro Gln Ala Gly Leu Phe Cys
1 5 10 15

Thr Ala Cys Leu Gly Arg Trp Trp Glu Ser Leu Trp Pro Ser Ala Leu
20 25 30

Pro Trp Gln Trp Gly Gln Leu Gly His Leu Gly Gly Ala Arg Leu Pro
35 40 45

Gln Ala Arg Pro Trp Asp Leu Ser Arg Cys Leu Val Val Ala Cys Phe
50 55 60

Ser Pro Gly Met Trp Glu Arg His Gln Thr Gln Asp Val Pro Leu Pro
65 70 75 80

Ala Pro Glu Ala Pro Ser Pro Asp Glu Leu Ala Gly Gly Val Ile Leu
85 90 95

Gly Val Ala Leu Trp Leu Arg His Asp Pro Gln Thr Thr Asn Leu Leu
100 105 110

Tyr Leu Glu Leu Gly Asp Lys Pro Ala Pro Asn Thr Phe Tyr Val Gly
115 120 125

Ile Tyr Ile Leu Ile Ala Val Gly Ala Val Met Met Phe Val Gly Phe
130 135 140

Leu Gly Cys Tyr Gly Ala Ile Gln Glu Ser Gln Cys Leu Leu Gly Thr
145 150 155 160

Phe Phe Thr Cys Leu Val Ile Leu Phe Ala Cys Glu Val Ala Ala Gly
165 170 175

Ile Trp Gly Phe Val Asn Lys Asp Gln Ile Ala Lys Asp Val Lys Gln
180 185 190

Phe Tyr Asp Gln Ala Leu Gln Gln Ala Val Val Asp Asp Asp Ala Asn
195 200 205

Asn Ala Lys Ala Val Val Lys Thr Phe His Glu Thr Leu Asp Cys Cys
210 215 220

Gly Ser Ser Thr Leu Thr Ala Leu Thr Thr Ser Val Leu Lys Asn Asn
225 230 235 240

272

Leu Cys Pro Ser Gly Ser Asn Ile Ile Ser Asn Leu Phe Lys Glu Asp
245 250 255

Cys His Gln Lys Ile Asp Asp Leu Phe Ser Gly Lys Leu Tyr Leu Ile
260 265 270

Gly Ile Ala Ala Ile Val Val Ala Val Ile Met Ile Phe Glu Met Ile
275 280 285

Leu Ser Met Val Leu Cys Cys Gly Ile Arg Asn Ser Ser Val Tyr
290 295 300

<210> 203

<211> 420

<212> PRT

<213> Homo sapien

<400> 203

Met Leu Pro Ser Gln Gly Ala Trp Gly Ser Ser Gly Gly Leu Ala Tyr
1 5 10 15

Thr Pro Trp Ser Ser Cys Pro Arg Trp Gly Ala Gly Leu Gln Pro Ser
20 25 30

Ala Gln Gly Leu Gly Ile Gln Leu Asp Pro Pro His Thr Ala Ala Arg
35 40 45

Phe Lys Cys Arg Ser Arg Asn Gly Ser Ala Ala Val Gln Pro Arg Leu
50 55 60

Gly Gly Arg Ser Gln Gln Gly Pro Pro Thr Leu Phe Ser His His Thr
65 70 75 80

Gly Glu Ala Ala Leu Val Pro Val Pro Val Pro Gly Leu Pro Ser Gln
85 90 95

Pro Arg Pro Thr Val Gly Pro Thr Leu Cys Leu Leu Met Pro Leu Pro
100 105 110

Pro His Ala Lys Ser Gln Arg Leu Trp Glu Arg Val Lys Ala Val Gly
115 120 125

Gly Gly Trp Gln Val Gln Ala Val Gly Gly Cys Gly Arg Trp Arg
130 135 140

Ala Pro Pro Gln Val Ser Ser Cys Glu Ala Pro Val Ala Ser Thr Gln

273

145

150

155

160

Ser Ala His Glu Val Pro Ser Pro His Val Ala Ser Leu Val Ser Val
165 170 175

Cys Val Met Glu Glu Val Thr Glu Ala Gln Lys Thr His Gln Ala Arg
180 185 190

Leu Gly Cys Glu Val Pro Cys Cys Ser Ser Leu Ala Val Ser Asn Pro
195 200 205

Thr Ser Ser Gln Leu Gly Gly Pro Trp Trp Val Arg His Pro Gly Pro
210 215 220

Ser Gly Val Leu Gly Cys Gly Glu Cys Val Gly Thr His Leu Val Ser
225 230 235 240

Leu Ser Pro Gln Gly Ile Tyr Ile Leu Ile Ala Val Gly Ala Val Met
245 250 255

Met Phe Val Gly Phe Leu Gly Cys Tyr Gly Ala Ile Gln Glu Ser Gln
260 265 270

Cys Leu Leu Gly Thr Phe Phe Thr Cys Leu Val Ile Leu Phe Ala Cys
275 280 285

Glu Val Ala Ala Gly Ile Trp Gly Phe Val Asn Lys Asp Gln Ile Ala
290 295 300

Lys Asp Val Lys Gln Phe Tyr Asp Gln Ala Leu Gln Gln Ala Val Val
305 310 315 320

Asp Asp Asp Ala Asn Asn Ala Lys Ala Val Val Lys Thr Phe His Glu
325 330 335

Thr Leu Asp Cys Cys Gly Ser Ser Thr Leu Thr Ala Leu Thr Thr Ser
340 345 350

Val Leu Lys Asn Asn Leu Cys Pro Ser Gly Ser Asn Ile Ile Ser Asn
355 360 365

Leu Phe Lys Glu Asp Cys His Gln Lys Ile Asp Asp Leu Phe Ser Gly
370 375 380

Lys Leu Tyr Leu Ile Gly Ile Ala Ala Ile Val Val Ala Val Ile Met
385 390 395 400

Ile Phe Glu Met Ile Leu Ser Met Val Leu Cys Cys Gly Ile Arg Asn
405 410 415

Ser Ser Val Tyr
420

<210> 204
<211> 247
<212> PRT
<213> Homo sapien

<400> 204

Ser Pro Ser Cys Val Met Glu Glu Val Thr Glu Ala Gln Lys Thr His
1 5 10 15

Gln Ala Arg Leu Gly Cys Glu Val Pro Cys Cys Ser Ser Leu Ala Val
20 25 30

Ser Asn Pro Thr Ser Ser Gln Leu Gly Gly Pro Trp Trp Val Arg His
35 40 45

Pro Gly Pro Ser Gly Val Leu Gly Cys Gly Glu Cys Val Gly Thr His
50 55 60

Leu Val Ser Leu Ser Pro Gln Gly Ile Tyr Ile Leu Ile Ala Val Gly
65 70 75 80

Ala Val Met Met Phe Val Gly Phe Leu Gly Cys Tyr Gly Ala Ile Gln
85 90 95

Glu Ser Gln Cys Leu Leu Gly Thr Phe Phe Thr Cys Leu Val Ile Leu
100 105 110

Phe Ala Cys Glu Val Ala Ala Gly Ile Trp Gly Phe Val Asn Lys Asp
115 120 125

Gln Ile Ala Lys Asp Val Lys Gln Phe Tyr Asp Gln Ala Leu Gln Gln
130 135 140

Ala Val Val Asp Asp Asp Ala Asn Asn Ala Lys Ala Val Val Lys Thr
145 150 155 160

Phe His Glu Thr Leu Asp Cys Cys Gly Ser Ser Thr Leu Thr Ala Leu
165 170 175

275

Thr Thr Ser Val Leu Lys Asn Asn Leu Cys Pro Ser Gly Ser Asn Ile
180 185 190

Ile Ser Asn Leu Phe Lys Glu Asp Cys His Gln Lys Ile Asp Asp Leu
195 200 205

Phe Ser Gly Lys Leu Tyr Leu Ile Gly Ile Ala Ala Ile Val Val Ala
210 215 220

Val Ile Met Ile Phe Glu Met Ile Leu Ser Met Val Leu Cys Cys Gly
225 230 235 240

Ile Arg Asn Ser Ser Val Tyr
245

<210> 205

<211> 236

<212> PRT

<213> Homo sapien

<400> 205

Met Gly Val Glu Gly Cys Thr Lys Cys Ile Lys Tyr Leu Leu Phe Val
1 5 10 15

Phe Asn Phe Val Phe Trp Leu Ala Gly Gly Val Ile Leu Gly Val Ala
20 25 30

Leu Trp Leu Arg His Asp Pro Gln Thr Thr Asn Leu Leu Tyr Leu Glu
35 40 45

Leu Gly Asp Lys Pro Ala Pro Asn Thr Phe Tyr Val Gly Ile Tyr Ile
50 55 60

Leu Ile Ala Val Gly Ala Val Met Met Phe Val Gly Phe Leu Gly Cys
65 70 75 80

Tyr Gly Ala Ile Gln Glu Ser Gln Cys Leu Leu Gly Thr Phe Phe Thr
85 90 95

Cys Leu Val Ile Leu Phe Ala Cys Glu Val Ala Ala Gly Ile Trp Gly
100 105 110

Phe Val Asn Lys Asp Gln Ile Ala Lys Asp Val Lys Gln Phe Tyr Asp
115 120 125

Gln Ala Leu Gln Gln Ala Val Val Asp Asp Asp Ala Asn Asn Ala Lys
130 135 140

276

Ala Val Val Lys Thr Phe His Glu Thr Leu Asp Cys Cys Gly Ser Ser
145 150 155 160

Thr Leu Thr Ala Leu Thr Thr Ser Val Leu Lys Asn Asn Leu Cys Pro
165 170 175

Ser Gly Ser Asn Ile Ile Ser Asn Leu Phe Lys Glu Asp Cys His Gln
180 185 190

Lys Ile Asp Asp Leu Phe Ser Gly Lys Leu Tyr Leu Ile Gly Ile Ala
195 200 205

Ala Ile Val Val Ala Val Ile Met Ile Phe Glu Met Ile Leu Ser Met
210 215 220

Val Leu Cys Cys Gly Ile Arg Asn Ser Ser Val Tyr
225 230 235

<210> 206

<211> 256

<212> PRT

<213> Homo sapien

<400> 206

Met Gly Val Glu Gly Cys Thr Lys Cys Ile Lys Tyr Leu Leu Phe Val
1 5 10 15

Phe Asn Phe Val Phe Trp Leu Ala Gly Gly Val Ile Leu Gly Val Ala
20 25 30

Leu Trp Leu Arg His Asp Pro Gln Thr Thr Asn Leu Leu Tyr Leu Glu
35 40 45

Leu Gly Asp Lys Pro Ala Pro Asn Thr Phe Tyr Val Gly Ile Tyr Ile
50 55 60

Leu Ile Ala Val Gly Ala Val Met Met Phe Val Gly Phe Leu Gly Cys
65 70 75 80

Tyr Gly Ala Ile Gln Glu Ser Gln Cys Leu Leu Gly Thr Phe Phe Thr
85 90 95

Cys Leu Val Ile Leu Phe Ala Cys Glu Val Ala Ala Gly Ile Trp Gly
100 105 110

277

Phe Val Asn Lys Asp Gln Ile Ala Lys Asp Val Lys Gln Phe Tyr Asp
115 120 125

Gln Ala Leu Gln Gln Ala Val Val Asp Asp Asp Ala Asn Asn Ala Lys
130 135 140

Ala Val Val Lys Thr Phe His Glu Thr Leu Asp Cys Cys Gly Ser Ser
145 150 155 160

Thr Leu Thr Ala Leu Thr Thr Ser Val Leu Lys Asn Asn Leu Cys Pro
165 170 175

Ser Gly Ser Asn Ile Ile Ser Asn Leu Phe Lys Glu Asp Cys His Gln
180 185 190

Lys Ile Asp Asp Leu Phe Ser Gly Lys Leu Tyr Leu Ile Gly Ile Ala
195 200 205

Ala Ile Val Val Ala Val Ile Met Ile Phe Glu Met Ile Leu Ser Met
210 215 220

Val Leu Asn Asp Asn Leu Cys Ile Ile Gly Lys Val Arg Ile Ser Gly
225 230 235 240

Arg Gln Gly Phe Tyr Pro Asn Gln Gln His Lys Arg Gln Tyr Asn Cys
245 250 255

<210> 207
<211> 210
<212> PRT
<213> Homo sapien

<400> 207

Met Gly Val Glu Gly Cys Thr Lys Cys Ile Lys Tyr Leu Leu Phe Val
1 5 10 15

Phe Asn Phe Val Phe Trp Leu Ala Gly Gly Val Ile Leu Gly Val Ala
20 25 30

Leu Trp Leu Arg His Asp Pro Gln Thr Thr Asn Leu Leu Tyr Leu Glu
35 40 45

Leu Gly Asp Lys Pro Ala Pro Asn Thr Phe Tyr Val Gly Ile Tyr Ile
50 55 60

Leu Ile Ala Val Gly Ala Val Met Met Phe Val Gly Phe Leu Gly Cys
65 70 75 80

278

Tyr Gly Ala Ile Gln Glu Ser Gln Cys Leu Leu Gly Thr Phe Phe Thr
85 90 95

Cys Leu Val Ile Leu Phe Ala Cys Glu Val Ala Ala Gly Ile Trp Gly
100 105 110

Phe Val Asn Lys Asp Gln Ile Ala Lys Asp Val Lys Gln Phe Tyr Asp
115 120 125

Gln Ala Leu Gln Gln Ala Val Val Asp Asp Asp Ala Asn Asn Ala Lys
130 135 140

Ala Val Val Lys Thr Phe His Glu Thr Leu Asp Cys Cys Gly Ser Ser
145 150 155 160

Thr Leu Thr Ala Leu Thr Thr Ser Val Leu Lys Asn Asn Leu Cys Pro
165 170 175

Ser Gly Ser Asn Ile Ile Ser Asn Leu Phe Lys Glu Asp Cys His Gln
180 185 190

Lys Ile Asp Asp Leu Phe Ser Gly Lys Leu Tyr Leu Ala Ala Thr Thr
195 200 205

Leu Arg
210

<210> 208
<211> 58
<212> PRT
<213> Homo sapien

<400> 208

Asn His Ile Glu Pro Leu Lys Ile Gln Trp Leu Asp Val Leu Gln Arg
1 5 10 15

Glu Pro Arg Pro Phe Pro Lys Leu Arg Ile Leu Arg Lys Val Glu Lys
20 25 30

Ile Asp Asp Phe Lys Ala Glu Asp Phe Gln Ile Glu Gly Tyr Asn Pro
35 40 45

His Pro Thr Ile Lys Met Glu Met Ala Val
50 55

279

<210> 209

<211> 91

<212> PRT

<213> Homo sapien

<400> 209

Lys Phe Ser Gly Ser Met Cys Phe Ser Glu Asn Pro Asp Leu Ser Gln
1 5 10 15

Ser Ser Gly Phe Phe Glu Lys Leu Arg Lys Leu Met Thr Ser Lys Leu
20 25 30

Lys Thr Phe Arg Leu Lys Gly Thr Ile Arg Ile Gln Leu Leu Lys Trp
35 40 45

Lys Trp Leu Phe Arg Val Leu Ser Lys Glu Leu Glu Gly Tyr Cys Gln
50 55 60

Ser Leu Gly Val Gly Leu Asp Ala Glu Val Lys Val Leu Phe Ala Leu
65 70 75 80

Lys Glu Lys Gly Thr Arg Ser Lys Ile Cys Pro
85 90

<210> 210

<211> 86

<212> PRT

<213> Homo sapien

<400> 210

Met Asp Asp Ser Glu Val Glu Ser Thr Ala Ser Ile Leu Ala Ser Val
1 5 10 15

Lys Glu Gln Glu Ala Gln Phe Glu Lys Leu Thr Arg Ala Leu Glu Glu
20 25 30

Glu Arg Arg His Val Ser Ala Gln Leu Glu Arg Val Arg Val Ser Pro
35 40 45

Gln Asp Ala Asn Pro Leu Met Ala Asn Gly Thr Ser Pro Phe Arg Lys
50 55 60

Lys Cys Lys Lys Lys Ser Ile Phe Ser Ser Arg Val Glu Leu Phe Lys
65 70 75 80

Glu Ser Lys Ile Ile Ser
85

280

<210> 211
<211> 107
<212> PRT
<213> Homo sapien

<400> 211

Met Ile Ile Tyr Tyr Met Val His Asn His Val Asp Ala Gln Cys Met
1 5 10 15

Ile Leu Gln Asn Arg Leu Ser Val Ser Arg Arg Val Leu Arg Gly Met
20 25 30

Val Met Tyr Thr Ser Lys Asp Arg Tyr Phe Tyr Phe Gly Lys Leu Asp
35 40 45

Gly Gln Ile Ser Ser Ala Tyr Pro Ser Gln Glu Gly Gln Val Leu Val
50 55 60

Gly Ile Tyr Gly Gln Tyr Gln Leu Leu Gly Ile Lys Ser Ile Gly Phe
65 70 75 80

Glu Trp Asn Tyr Pro Leu Glu Glu Pro Thr Thr Glu Pro Pro Val Asn
85 90 95

Leu Thr Tyr Ser Ala Asn Ser Pro Val Gly Arg
100 105

<210> 212
<211> 90
<212> PRT
<213> Homo sapien

<400> 212

Tyr Cys Arg Ile Gly Leu Arg Val Ala Arg Val Leu Arg Gly Met Val
1 5 10 15

Met Tyr Thr Ser Lys Asp Arg Tyr Phe Tyr Phe Gly Lys Leu Asp Gly
20 25 30

Gln Ile Ser Ser Ala Tyr Pro Ser Gln Glu Gly Gln Val Leu Val Gly
35 40 45

Ile Tyr Gly Gln Tyr Gln Leu Leu Gly Ile Lys Ser Ile Gly Phe Glu
50 55 60

Trp Asn Tyr Pro Leu Glu Glu Pro Thr Thr Glu Pro Pro Val Asn Leu
65 70 75 80

281

Thr Tyr Ser Ala Asn Ser Pro Val Gly Arg
85 90

<210> 213
<211> 193
<212> PRT
<213> Homo sapien

<400> 213

Met Asp Glu Arg Pro Pro Gly Gln Val Thr Gly Glu Ser Pro Gly Met
1 5 10 15

His Arg Pro Glu Ala Met Leu Leu Leu Thr Leu Ala Leu Leu Gly
20 25 30

Gly Pro Thr Trp Ala Gly Lys Met Tyr Gly Pro Gly Gly Lys Tyr
35 40 45

Phe Ser Thr Thr Glu Asp Tyr Asp His Glu Ile Thr Gly Leu Arg Val
50 55 60

Ser Val Gly Leu Leu Leu Val Lys Ser Val Gln Val Lys Leu Gly Asp
65 70 75 80

Ser Trp Asp Val Lys Leu Gly Ala Leu Gly Gly Asn Thr Gln Glu Val
85 90 95

Thr Leu Gln Pro Gly Glu Tyr Ile Thr Lys Val Phe Val Ala Phe Gln
100 105 110

Ala Phe Leu Arg Gly Met Val Met Tyr Thr Ser Lys Asp Arg Tyr Phe
115 120 125

Tyr Phe Gly Lys Leu Asp Gly Gln Ile Ser Ser Ala Tyr Pro Ser Gln
130 135 140

Glu Gly Gln Val Leu Val Gly Ile Tyr Gly Gln Tyr Gln Leu Leu Gly
145 150 155 160

Ile Lys Ser Ile Gly Phe Glu Trp Asn Tyr Pro Leu Glu Glu Pro Thr
165 170 175

Thr Glu Pro Pro Val Asn Leu Thr Tyr Ser Ala Asn Ser Pro Val Gly
180 185 190

282

Arg

<210> 214
<211> 189
<212> PRT
<213> Homo sapien

<400> 214

Ala Ala Ala Arg Ala Gly Gly Glu Ser Pro Gly Met His Arg Pro Glu
1 5 10 15

Ala Met Leu Leu Leu Leu Thr Leu Ala Leu Leu Gly Gly Pro Thr Trp
20 25 30

Ala Gly Lys Met Tyr Gly Pro Gly Gly Lys Tyr Phe Ser Thr Thr
35 40 45

Glu Asp Tyr Asp His Glu Ile Thr Gly Leu Arg Val Ser Val Gly Leu
50 55 60

Leu Leu Val Lys Ser Val Gln Val Lys Leu Gly Asp Ser Trp Asp Val
65 70 75 80

Lys Leu Gly Ala Leu Gly Asn Thr Gln Glu Val Thr Leu Gln Pro
85 90 95

Gly Glu Tyr Ile Thr Lys Val Phe Val Ala Phe Gln Ala Phe Leu Arg
100 105 110

Gly Met Val Met Tyr Thr Ser Lys Asp Arg Tyr Phe Tyr Phe Gly Lys
115 120 125

Leu Asp Gly Gln Ile Ser Ser Ala Tyr Pro Ser Gln Glu Gly Gln Val
130 135 140

Leu Val Gly Ile Tyr Gly Gln Tyr Gln Leu Leu Gly Ile Lys Ser Ile
145 150 155 160

Gly Phe Glu Trp Asn Tyr Pro Leu Glu Glu Pro Thr Thr Glu Pro Pro
165 170 175

Val Asn Leu Thr Tyr Ser Ala Asn Ser Pro Val Gly Arg
180 185

<210> 215
<211> 202

283

<212> PRT

<213> Homo sapien

<400> 215

Met Asp Arg Pro Pro Gly Arg Trp Arg Val Pro Gly Thr Thr Arg Arg
1 5 10 15

Pro Val Thr Gly Glu Ser Pro Gly Met His Arg Pro Glu Ala Met Leu
20 25 30

Leu Leu Leu Thr Leu Ala Leu Leu Gly Gly Pro Thr Trp Ala Gly Lys
35 40 45

Met Tyr Gly Pro Gly Gly Lys Tyr Phe Ser Thr Thr Glu Asp Tyr
50 55 60

Asp His Glu Ile Thr Gly Leu Arg Val Ser Val Gly Leu Leu Leu Val
65 70 75 80

Lys Ser Val Gln Val Lys Leu Gly Asp Ser Trp Asp Val Lys Leu Gly
85 90 95

Ala Leu Gly Gly Asn Thr Gln Glu Val Thr Leu Gln Pro Gly Glu Tyr
100 105 110

Ile Thr Lys Val Phe Val Ala Phe Gln Ala Phe Leu Arg Gly Met Val
115 120 125

Met Tyr Thr Ser Lys Asp Arg Tyr Phe Tyr Phe Gly Lys Leu Asp Gly
130 135 140

Gln Ile Ser Ser Ala Tyr Pro Ser Gln Glu Gly Gln Val Leu Val Gly
145 150 155 160

Ile Tyr Gly Gln Tyr Gln Leu Leu Gly Ile Lys Ser Ile Gly Phe Glu
165 170 175

Trp Asn Tyr Pro Leu Glu Glu Pro Thr Thr Glu Pro Pro Val Asn Leu
180 185 190

Thr Tyr Ser Ala Asn Ser Pro Val Gly Arg
195 200

<210> 216

<211> 208

<212> PRT

<213> Homo sapien

284

<400> 216

Cys Arg Ala Ala Gln Cys Asp Gly Ser Ala Ala Gly Gln Val Glu Gly
1 5 10 15

Ala Arg His Asn Gln Thr Pro Ser His Gly Glu Ser Pro Gly Met His
20 25 30

Arg Pro Glu Ala Met Leu Leu Leu Thr Leu Ala Leu Leu Gly Gly
35 40 45

Pro Thr Trp Ala Gly Lys Met Tyr Gly Pro Gly Gly Lys Tyr Phe
50 55 60

Ser Thr Thr Glu Asp Tyr Asp His Glu Ile Thr Gly Leu Arg Val Ser
65 70 75 80

Val Gly Leu Leu Leu Val Lys Ser Val Gln Val Lys Leu Gly Asp Ser
85 90 95

Trp Asp Val Lys Leu Gly Ala Leu Gly Gly Asn Thr Gln Glu Val Thr
100 105 110

Leu Gln Pro Gly Glu Tyr Ile Thr Lys Val Phe Val Ala Phe Gln Ala
115 120 125

Phe Leu Arg Gly Met Val Met Tyr Thr Ser Lys Asp Arg Tyr Phe Tyr
130 135 140

Phe Gly Lys Leu Asp Gly Gln Ile Ser Ser Ala Tyr Pro Ser Gln Glu
145 150 155 160

Gly Gln Val Leu Val Gly Ile Tyr Gly Gln Tyr Gln Leu Leu Gly Ile
165 170 175

Lys Ser Ile Gly Phe Glu Trp Asn Tyr Pro Leu Glu Glu Pro Thr Thr
180 185 190

Glu Pro Pro Val Asn Leu Thr Tyr Ser Ala Asn Ser Pro Val Gly Arg
195 200 205

<210> 217

<211> 189

<212> PRT

<213> Homo sapien

<400> 217

285

Met His Val Glu Arg Arg Ser Val Met Asp Arg Gly Arg Gly Glu Val
1 5 10 15

Ala Met Leu Leu Leu Leu Thr Leu Ala Leu Leu Gly Gly Pro Thr Trp
20 25 30

Ala Gly Lys Met Tyr Gly Pro Gly Gly Lys Tyr Phe Ser Thr Thr
35 40 45

Glu Asp Tyr Asp His Glu Ile Thr Gly Leu Arg Val Ser Val Gly Leu
50 55 60

Leu Leu Val Lys Ser Val Gln Val Lys Leu Gly Asp Ser Trp Asp Val
65 70 75 80

Lys Leu Gly Ala Leu Gly Gly Asn Thr Gln Glu Val Thr Leu Gln Pro
85 90 95

Gly Glu Tyr Ile Thr Lys Val Phe Val Ala Phe Gln Ala Phe Leu Arg
100 105 110

Gly Met Val Met Tyr Thr Ser Lys Asp Arg Tyr Phe Tyr Phe Gly Lys
115 120 125

Leu Asp Gly Gln Ile Ser Ser Ala Tyr Pro Ser Gln Glu Gly Gln Val
130 135 140

Leu Val Gly Ile Tyr Gly Gln Tyr Gln Leu Leu Gly Ile Lys Ser Ile
145 150 155 160

Gly Phe Glu Trp Asn Tyr Pro Leu Glu Glu Pro Thr Thr Glu Pro Pro
165 170 175

Val Asn Leu Thr Tyr Ser Ala Asn Ser Pro Val Gly Arg
180 185

<210> 218
<211> 171
<212> PRT
<213> Homo sapien

<400> 218

Met Leu Glu Arg Arg Ile Val Asn Gly Ser Pro Gly Gln Val Gln Ser
1 5 10 15

Gln Met Tyr Gly Pro Gly Gly Lys Tyr Phe Ser Thr Thr Glu Asp

286

20

25

30

Tyr Asp His Glu Ile Thr Gly Leu Arg Val Ser Val Gly Leu Leu Leu
 35 40 45

Val Lys Ser Val Gln Val Lys Leu Gly Asp Ser Trp Asp Val Lys Leu
 50 55 60

Gly Ala Leu Gly Gly Asn Thr Gln Glu Val Thr Leu Gln Pro Gly Glu
 65 70 75 80

Tyr Ile Thr Lys Val Phe Val Ala Phe Gln Ala Phe Leu Arg Gly Met
 85 90 95

Val Met Tyr Thr Ser Lys Asp Arg Tyr Phe Tyr Phe Gly Lys Leu Asp
 100 105 110

Gly Gln Ile Ser Ser Ala Tyr Pro Ser Gln Glu Gly Gln Val Leu Val
 115 120 125

Gly Ile Tyr Gly Gln Tyr Gln Leu Leu Gly Ile Lys Ser Ile Gly Phe
 130 135 140

Glu Trp Asn Tyr Pro Leu Glu Glu Pro Thr Thr Glu Pro Pro Val Asn
 145 150 155 160

Leu Thr Tyr Ser Ala Asn Ser Pro Val Gly Arg
 165 170

<210> 219
 <211> 171
 <212> PRT
 <213> Homo sapien

<220>
 <221> MISC_FEATURE
 <222> (6)..(6)
 <223> X=any amino acid

<400> 219

His Ala Arg Ala Ala Xaa Cys Asp Gly Ser Pro Gly Gln Val Gln Ser
 1 5 10 15

Gln Met Tyr Gly Pro Gly Gly Lys Tyr Phe Ser Thr Thr Glu Asp
 20 25 30

Tyr Asp His Glu Ile Thr Gly Leu Arg Val Ser Val Gly Leu Leu Leu

287

35

40

45

Val Lys Ser Val Gln Val Lys Leu Gly Asp Ser Trp Asp Val Lys Leu
50 55 60

Gly Ala Leu Gly Gly Asn Thr Gln Glu Val Thr Leu Gln Pro Gly Glu
65 70 75 80

Tyr Ile Thr Lys Val Phe Val Ala Phe Gln Ala Phe Leu Arg Gly Met
85 90 95

Val Met Tyr Thr Ser Lys Asp Arg Tyr Phe Tyr Phe Gly Lys Leu Asp
100 105 110

Gly Gln Ile Ser Ser Ala Tyr Pro Ser Gln Glu Gly Gln Val Leu Val
115 120 125

Gly Ile Tyr Gly Gln Tyr Gln Leu Leu Gly Ile Lys Ser Ile Gly Phe
130 135 140

Glu Trp Asn Tyr Pro Leu Glu Glu Pro Thr Thr Glu Pro Pro Val Asn
145 150 155 160

Leu Thr Tyr Ser Ala Asn Ser Pro Val Gly Arg
165 170

<210> 220
<211> 156
<212> PRT
<213> Homo sapien

<400> 220

Met Val Leu Asp Ser Leu His Pro Gly Lys Glu Asp Gly Gly Ala Glu
1 5 10 15

Asp Pro Gly Cys Ala Gly Pro Ser Gln Ile Trp Thr Ser Lys Ala Leu
20 25 30

Pro Leu Ser Ser Val Gln Val Lys Leu Gly Asp Ser Trp Asp Val Lys
35 40 45

Leu Gly Ala Leu Gly Gly Asn Thr Gln Glu Val Thr Leu Gln Pro Gly
50 55 60

Glu Tyr Ile Thr Lys Val Phe Val Ala Phe Gln Ala Phe Leu Arg Gly
65 70 75 80

Met Val Met Tyr Thr Ser Lys Asp Arg Tyr Phe Tyr Phe Gly Lys Leu
85 90 95

Asp Gly Gln Ile Ser Ser Ala Tyr Pro Ser Gln Glu Gly Gln Val Leu
100 105 110

Val Gly Ile Tyr Gly Gln Tyr Gln Leu Leu Gly Ile Lys Ser Ile Gly
115 120 125

Phe Glu Trp Asn Tyr Pro Leu Glu Glu Pro Thr Thr Glu Pro Pro Val
130 135 140

Asn Leu Thr Tyr Ser Ala Asn Ser Pro Val Gly Arg
145 150 155

<210> 221
<211> 156
<212> PRT
<213> Homo sapien

<400> 221

Trp Cys Trp Thr Leu Cys Ile Pro Gly Arg Arg Met Gly Ala Leu Arg
1 5 10 15

Thr Arg Asp Val Leu Gly His Pro Arg Ser Gly Arg Pro Lys Leu Cys
20 25 30

Leu Ser Pro Ser Val Gln Val Lys Leu Gly Asp Ser Trp Asp Val Lys
35 40 45

Leu Gly Ala Leu Gly Gly Asn Thr Gln Glu Val Thr Leu Gln Pro Gly
50 55 60

Glu Tyr Ile Thr Lys Val Phe Val Ala Phe Gln Ala Phe Leu Arg Gly
65 70 75 80

Met Val Met Tyr Thr Ser Lys Asp Arg Tyr Phe Tyr Phe Gly Lys Leu
85 90 95

Asp Gly Gln Ile Ser Ser Ala Tyr Pro Ser Gln Glu Gly Gln Val Leu
100 105 110

Val Gly Ile Tyr Gly Gln Tyr Gln Leu Leu Gly Ile Lys Ser Ile Gly
115 120 125

Phe Glu Trp Asn Tyr Pro Leu Glu Glu Pro Thr Thr Glu Pro Pro Val

289

130

135

140

Asn Leu Thr Tyr Ser Ala Asn Ser Pro Val Gly Arg
145 150 155

<210> 222
<211> 76
<212> PRT
<213> Homo sapien

<400> 222

Met Val Met Tyr Thr Ser Lys Asp Arg Tyr Phe Tyr Phe Gly Lys Leu
1 5 10 15

Asp Gly Gln Ile Ser Ser Ala Tyr Pro Ser Gln Glu Gly Gln Val Leu
20 25 30

Val Gly Ile Tyr Gly Gln Tyr Gln Leu Leu Gly Ile Lys Ser Ile Gly
35 40 45

Phe Glu Trp Asn Tyr Pro Leu Glu Glu Pro Thr Thr Glu Pro Pro Val
50 55 60

Asn Leu Thr Tyr Ser Ala Asn Ser Pro Val Gly Arg
65 70 75

<210> 223
<211> 139
<212> PRT
<213> Homo sapien

<400> 223

Leu Cys Arg Gly Gln Lys Glu Ser Ser Thr Thr Pro Ser Glu Val Leu
1 5 10 15

Trp Ile Ser Val Pro Val Pro Gln Ser Leu Lys Ser Gln Ala Ser Arg
20 25 30

Pro Pro Leu Pro Thr Val Pro His Pro Arg Pro Thr Gln Arg Ala Ser
35 40 45

Ala Gly His Ser Val Pro Gly Phe Ser Glu Cys Ser Arg Gly Leu Arg
50 55 60

Glu Ala Thr His Ser Ser Ile His Ser Ala Asn Ile Cys Gln Gly Arg
65 70 75 80

290

Val Leu Thr Arg Leu Ala Trp His Trp Gly Tyr Lys Glu Glu Ala Arg
85 90 95

Phe Gln Leu Ser Ala Tyr Thr Leu Trp Trp Gly Leu Val Gln Arg Gln
100 105 110

Ile Val Ala Val His Phe Ala Ile Cys Met Asp Gly Asp Thr Cys Arg
115 120 125

Ser Leu Cys Val Gly Thr Cys Pro Glu Val Arg
130 135

<210> 224
<211> 568
<212> PRT
<213> Homo sapien

<400> 224

Met Val Lys Leu Ala Lys Ala Gly Lys Asn Gln Gly Asp Pro Lys Lys
1 5 10 15

Met Ala Pro Pro Pro Lys Glu Val Glu Glu Asp Ser Glu Asp Glu Glu
20 25 30

Met Ser Glu Asp Glu Glu Asp Asp Ser Ser Gly Glu Glu Val Val Ile
35 40 45

Pro Gln Lys Lys Gly Lys Lys Ala Ala Ala Thr Ser Ala Lys Lys Val
50 55 60

Val Val Ser Pro Thr Lys Lys Val Ala Val Ala Thr Pro Ala Lys Lys
65 70 75 80

Ala Ala Val Thr Pro Gly Lys Lys Ala Ala Ala Thr Pro Ala Lys Lys
85 90 95

Thr Val Thr Pro Ala Lys Ala Val Thr Thr Pro Gly Lys Lys Gly Ala
100 105 110

Thr Pro Gly Lys Ala Leu Val Ala Thr Pro Gly Lys Lys Gly Ala Ala
115 120 125

Ile Pro Ala Lys Gly Ala Lys Asn Gly Lys Asn Ala Lys Lys Glu Asp
130 135 140

Ser Asp Glu Glu Glu Asp Asp Ser Glu Glu Asp Glu Glu Asp Asp
145 150 155 160

291

Glu Asp Glu Asp Glu Asp Glu Asp Glu Ile Glu Pro Ala Ala Met Lys
165 170 175

Ala Ala Ala Ala Ala Pro Ala Ser Glu Asp Glu Asp Asp Glu Asp Asp
180 185 190

Glu Asp Asp Glu Asp Asp Asp Asp Glu Glu Asp Asp Ser Glu Glu
195 200 205

Glu Ala Met Glu Thr Thr Pro Ala Lys Gly Lys Lys Ala Ala Lys Val
210 215 220

Val Pro Val Lys Ala Lys Asn Val Ala Glu Asp Glu Asp Glu Glu
225 230 235 240

Asp Asp Glu Asp Glu Asp Asp Asp Asp Glu Asp Asp Glu Asp Asp
245 250 255

Asp Asp Glu Asp Asp Glu Glu Glu Glu Glu Glu Glu Glu Pro
260 265 270

Val Lys Glu Ala Pro Gly Lys Arg Lys Lys Glu Met Ala Lys Gln Lys
275 280 285

Ala Ala Pro Glu Ala Lys Lys Gln Lys Val Glu Gly Thr Glu Pro Thr
290 295 300

Thr Ala Phe Asn Leu Phe Val Gly Asn Leu Asn Phe Asn Lys Ser Ala
305 310 315 320

Pro Glu Leu Lys Thr Gly Ile Ser Asp Val Phe Ala Lys Asn Asp Leu
325 330 335

Ala Val Val Asp Val Arg Ile Gly Met Thr Arg Lys Phe Gly Tyr Val
340 345 350

Asp Phe Glu Ser Ala Glu Asp Leu Glu Lys Ala Leu Glu Leu Thr Gly
355 360 365

Leu Lys Val Phe Gly Asn Glu Ile Lys Leu Glu Lys Pro Lys Gly Lys
370 375 380

Asp Ser Lys Lys Glu Arg Asp Ala Arg Thr Leu Leu Ala Lys Asn Leu
385 390 395 400

292

Pro Tyr Lys Val Thr Gln Asp Glu Leu Lys Glu Val Phe Glu Asp Ala
405 410 415

Ala Glu Ile Arg Leu Val Ser Lys Asp Gly Lys Ser Lys Gly Ile Ala
420 425 430

Tyr Ile Glu Phe Lys Thr Glu Ala Asp Ala Glu Lys Thr Phe Glu Glu
435 440 445

Lys Gln Gly Thr Glu Ile Asp Gly Arg Ser Ile Ser Leu Tyr Tyr Thr
450 455 460

Gly Glu Lys Gly Gln Asn Gln Asp Tyr Arg Gly Gly Lys Asn Ser Thr
465 470 475 480

Trp Ser Gly Glu Ser Lys Thr Leu Val Leu Ser Asn Leu Ser Tyr Ser
485 490 495

Ala Thr Glu Glu Thr Leu Gln Glu Val Phe Glu Lys Ala Thr Phe Ile
500 505 510

Lys Val Pro Gln Asn Gln Asn Gly Lys Ser Lys Gly Tyr Ala Phe Ile
515 520 525

Glu Phe Ala Ser Phe Glu Asp Ala Lys Glu Ala Leu Asn Ser Cys Asn
530 535 540

Lys Arg Glu Ile Glu Gly Arg Ala Ile Arg Leu Glu Ala Arg Arg Leu
545 550 555 560

Pro Arg Arg Gln Arg Arg Arg Arg
565

<210> 225
<211> 520
<212> PRT
<213> Homo sapien

<400> 225

Met Val Lys Leu Ala Lys Ala Gly Lys Asn Gln Gly Asp Pro Lys Lys
1 5 10 15

Met Ala Pro Pro Pro Lys Glu Val Glu Glu Asp Ser Glu Asp Glu Glu
20 25 30

Met Ser Glu Asp Glu Glu Asp Asp Ser Ser Gly Glu Glu Val Val Ile

293

35

40

45

Pro Gln Lys Lys Gly Lys Lys Ala Ala Ala Thr Ser Ala Lys Lys Val
50 55 60

Val Val Ser Pro Thr Lys Lys Val Ala Val Ala Thr Pro Ala Lys Lys
65 70 75 80

Ala Ala Val Thr Pro Gly Lys Lys Ala Ala Ala Thr Pro Ala Lys Lys
85 90 95

Thr Val Thr Pro Ala Lys Ala Val Thr Thr Pro Gly Lys Lys Gly Ala
100 105 110

Thr Pro Gly Lys Ala Leu Val Ala Thr Pro Gly Lys Lys Gly Ala Ala
115 120 125

Ile Pro Ala Lys Gly Ala Lys Asn Gly Lys Asn Ala Lys Lys Glu Asp
130 135 140

Ser Asp Glu Glu Glu Asp Asp Asp Ser Glu Glu Asp Glu Glu Asp Asp
145 150 155 160

Glu Asp Glu Asp Glu Asp Glu Ile Glu Pro Ala Ala Met Lys
165 170 175

Ala Ala Ala Ala Ala Pro Ala Ser Glu Asp Glu Asp Asp Glu Asp Asp
180 185 190

Glu Asp Asp Glu Asp Asp Asp Asp Asp Glu Glu Asp Asp Ser Glu Glu
195 200 205

Glu Ala Met Glu Thr Thr Pro Ala Lys Gly Lys Lys Ala Ala Lys Val
210 215 220

Val Pro Val Lys Ala Lys Asn Val Ala Glu Asp Glu Asp Glu Glu
225 230 235 240

Asp Asp Glu Asp Glu Asp Asp Asp Asp Glu Asp Asp Glu Asp Asp
245 250 255

Asp Asp Glu Asp Asp Glu Glu Glu Glu Glu Glu Glu Glu Pro
260 265 270

Val Lys Glu Ala Pro Gly Lys Arg Lys Lys Glu Met Ala Lys Gln Lys
275 280 285

294

Ala Ala Pro Glu Ala Lys Lys Gln Lys Val Glu Gly Thr Glu Pro Thr
290 295 300

Thr Ala Phe Asn Leu Phe Val Gly Asn Leu Asn Phe Asn Lys Ser Ala
305 310 315 320

Pro Glu Leu Lys Thr Gly Ile Ser Asp Val Phe Ala Lys Asn Asp Leu
325 330 335

Ala Val Val Asp Val Arg Ile Gly Met Thr Arg Lys Phe Gly Tyr Val
340 345 350

Asp Phe Glu Ser Ala Glu Asp Leu Glu Lys Ala Leu Glu Leu Thr Gly
355 360 365

Leu Lys Val Phe Gly Asn Glu Ile Lys Leu Glu Lys Pro Lys Gly Lys
370 375 380

Asp Ser Lys Lys Glu Arg Asp Ala Arg Thr Leu Leu Ala Lys Asn Leu
385 390 395 400

Pro Tyr Lys Val Thr Gln Asp Glu Leu Lys Glu Val Phe Glu Asp Ala
405 410 415

Ala Glu Ile Arg Leu Val Ser Lys Asp Gly Lys Ser Lys Gly Ile Ala
420 425 430

Tyr Ile Glu Phe Lys Thr Glu Ala Asp Ala Glu Lys Thr Phe Glu Glu
435 440 445

Lys Gln Gly Thr Glu Ile Asp Gly Arg Ser Ile Ser Leu Tyr Tyr Thr
450 455 460

Gly Glu Lys Gly Gln Asn Gln Asp Tyr Arg Gly Gly Lys Asn Ser Thr
465 470 475 480

Trp Ser Gly Glu Ser Lys Thr Leu Val Leu Ser Asn Leu Ser Tyr Ser
485 490 495

Ala Thr Glu Glu Thr Leu Gln Glu Val Phe Glu Lys Ala Thr Phe Ile
500 505 510

Lys Val Pro Arg Pro Arg Pro Arg
515 520

295

<210> 226
<211> 526
<212> PRT
<213> Homo sapien

<400> 226

Met Leu Arg Leu Pro Thr Val Phe Arg Gln Met Arg Pro Val Ser Arg
1 5 10 15

Val Leu Ala Pro His Leu Thr Arg Ala Tyr Ala Lys Asp Val Lys Phe
20 25 30

Gly Ala Asp Ala Arg Ala Leu Met Leu Gln Gly Val Asp Leu Leu Ala
35 40 45

Asp Ala Val Ala Val Thr Met Gly Pro Lys Gly Arg Thr Val Ile Ile
50 55 60

Glu Gln Ser Trp Gly Ser Pro Lys Val Thr Lys Asp Gly Val Thr Val
65 70 75 80

Ala Lys Ser Ile Asp Leu Lys Asp Lys Tyr Lys Asn Ile Gly Ala Lys
85 90 95

Leu Val Gln Asp Val Ala Asn Asn Thr Asn Glu Glu Ala Gly Asp Gly
100 105 110

Thr Thr Thr Ala Thr Val Leu Ala Arg Ser Ile Ala Lys Glu Gly Phe
115 120 125

Glu Lys Ile Ser Lys Gly Ala Asn Pro Val Glu Ile Arg Arg Gly Val
130 135 140

Met Leu Ala Val Asp Ala Val Ile Ala Glu Leu Lys Lys Gln Ser Lys
145 150 155 160

Pro Val Thr Thr Pro Glu Glu Ile Ala Gln Val Ala Thr Ile Ser Ala
165 170 175

Asn Gly Asp Lys Glu Ile Gly Asn Ile Ile Ser Asp Ala Met Lys Lys
180 185 190

Val Gly Arg Lys Gly Val Ile Thr Val Lys Asp Gly Lys Thr Leu Asn
195 200 205

Asp Glu Leu Glu Ile Ile Glu Gly Met Lys Phe Asp Arg Gly Tyr Ile

296

210

215

220

Ser Pro Tyr Phe Ile Asn Thr Ser Lys Gly Gln Lys Cys Glu Phe Gln
225 230 235 240

Asp Ala Tyr Val Leu Leu Ser Glu Lys Lys Ile Ser Ser Ile Gln Ser
245 250 255

Ile Val Pro Ala Leu Glu Ile Ala Asn Ala His Arg Lys Pro Leu Val
260 265 270

Ile Ile Ala Glu Asp Val Asp Gly Glu Ala Leu Ser Thr Leu Val Leu
275 280 285

Asn Arg Leu Lys Val Gly Leu Gln Val Val Ala Val Lys Ala Pro Gly
290 295 300

Phe Gly Asp Asn Arg Lys Asn Gln Leu Lys Asp Met Ala Ile Ala Thr
305 310 315 320

Gly Gly Ala Val Phe Gly Glu Glu Gly Leu Thr Leu Asn Leu Glu Asp
325 330 335

Val Gln Pro His Asp Leu Gly Lys Val Gly Glu Val Ile Val Thr Lys
340 345 350

Asp Asp Ala Met Leu Leu Lys Gly Lys Gly Asp Lys Ala Gln Ile Glu
355 360 365

Lys Arg Ile Gln Glu Ile Ile Glu Gln Leu Asp Val Thr Thr Ser Glu
370 375 380

Tyr Glu Lys Glu Lys Leu Asn Glu Arg Leu Ala Lys Leu Ser Asp Gly
385 390 395 400

Val Ala Val Leu Lys Val Gly Gly Thr Ser Asp Val Glu Val Asn Glu
405 410 415

Lys Lys Asp Arg Val Thr Asp Ala Leu Asn Ala Thr Arg Ala Ala Val
420 425 430

Glu Glu Gly Ile Val Leu Gly Gly Cys Ala Leu Leu Arg Cys Ile
435 440 445

Pro Ala Leu Asp Ser Leu Thr Pro Ala Asn Glu Asp Gln Lys Ile Gly
450 455 460

Ile Glu Ile Ile Lys Arg Thr Leu Lys Ile Pro Ala Met Thr Ile Ala
465 470 475 480

Lys Asn Ala Gly Val Glu Gly Ser Leu Ile Val Glu Lys Ile Met Gln
485 490 495

Ser Ser Ser Glu Val Gly Tyr Asp Ala Met Ala Gly Asp Phe Val Asn
500 505 510

Met Val Glu Lys Gly Ile Ile Asp Pro Thr Lys Val Asn Gly
515 520 525

<210> 227

<211> 121

<212> PRT

<213> Homo sapien

<400> 227

Gln Cys Asp Gly Phe Ala Ala Glu Val Ser Thr Val His Glu Ile Leu
1 5 10 15

Cys Lys Leu Ser Leu Glu Gly Asp His Ser Thr Pro Pro Ser Ala Tyr
20 25 30

Gly Ser Val Lys Ala Tyr Thr Asn Phe Asp Ala Glu Arg Asp Ala Leu
35 40 45

Asn Ile Glu Thr Ala Ile Lys Thr Lys Glu Ala Val Asp Glu Val Thr
50 55 60

Ile Val Asn Ile Leu Thr Asn Arg Ser Asn Ala Gln Arg Gln Asp Ile
65 70 75 80

Ala Phe Ala Tyr Gln Arg Arg Thr Lys Lys Glu Leu Ala Ser Ala Leu
85 90 95

Lys Ser Ala Leu Ser Gly His Leu Glu Thr Val Ile Leu Gly Leu Leu
100 105 110

Lys Thr Pro Ala Gln Tyr Asp Ala Ser
115 120

<210> 228

<211> 71

<212> PRT

<213> Homo sapien

298

<400> 228

Asn Ser His Gln Asp Gln Arg Gly Val Asp Glu Val Thr Ile Val Asn
1 5 10 15

Ile Leu Thr Asn Arg Ser Asn Ala Gln Arg Gln Asp Ile Ala Phe Ala
20 25 30

Tyr Gln Arg Arg Thr Lys Lys Glu Leu Ala Ser Ala Leu Lys Ser Ala
35 40 45

Leu Ser Gly His Leu Glu Thr Val Ile Leu Gly Leu Leu Lys Thr Pro
50 55 60

Ala Gln Tyr Asp Ala Ser Glu
65 70

<210> 229

<211> 242

<212> PRT

<213> Homo sapien

<400> 229

Met Leu Glu Arg Arg Ser Val Met Asp Val Val Ala Ala Glu Gly Arg
1 5 10 15

Ser Gln Leu Ser Ala His Gly Pro Ala Ser Phe Lys Met Ser Thr Val
20 25 30

His Glu Ile Leu Cys Lys Leu Ser Leu Glu Gly Asp His Ser Thr Pro
35 40 45

Pro Ser Ala Tyr Gly Ser Val Lys Ala Tyr Thr Asn Phe Asp Ala Glu
50 55 60

Arg Asp Ala Leu Asn Ile Glu Thr Ala Ile Lys Thr Lys Gly Val Asp
65 70 75 80

Glu Val Thr Ile Val Asn Ile Leu Thr Asn Arg Ser Asn Ala Gln Arg
85 90 95

Gln Asp Ile Ala Phe Ala Tyr Gln Arg Arg Thr Lys Lys Glu Leu Ala
100 105 110

Ser Ala Leu Lys Ser Ala Leu Ser Gly His Leu Glu Thr Val Ile Leu
115 120 125

299

Gly Leu Leu Lys Thr Pro Ala Gln Tyr Asp Ala Ser Glu Leu Cys Ser
130 135 140

Arg Thr Asn Gln Glu Leu Gln Glu Ile Asn Arg Val Tyr Lys Glu Met
145 150 155 160

Tyr Lys Thr Asp Leu Glu Lys Asp Ile Ile Ser Asp Thr Ser Gly Asp
165 170 175

Phe Arg Lys Leu Met Val Ala Leu Ala Lys Gly Arg Arg Ala Glu Asp
180 185 190

Gly Ser Val Ile Asp Tyr Glu Leu Ile Asp Gln Asp Ala Arg Asp Leu
195 200 205

Tyr Asp Ala Gly Val Lys Arg Val Lys Arg Lys Gly Thr Asp Val Pro
210 215 220

Lys Trp Ile Ser Ile Met Thr Glu Arg Ser Val Ala Pro Pro Pro Glu
225 230 235 240

Ser Ile

<210> 230
<211> 342
<212> PRT
<213> Homo sapien

<400> 230

Trp Ile Val Val Ala Ala Glu Gly Arg Ser Gln Leu Ser Ala His Gly
1 5 10 15

Pro Ala Ser Phe Lys Met Ser Thr Val His Glu Ile Leu Cys Lys Leu
20 25 30

Ser Leu Glu Gly Asp His Ser Thr Pro Pro Ser Ala Tyr Gly Ser Val
35 40 45

Lys Ala Tyr Thr Asn Phe Asp Ala Glu Arg Asp Ala Leu Asn Ile Glu
50 55 60

Thr Ala Ile Lys Thr Lys Gly Val Asp Glu Val Thr Ile Val Asn Ile
65 70 75 80

Leu Thr Asn Arg Ser Asn Ala Gln Arg Gln Asp Ile Ala Phe Ala Tyr

300
85 90 95

Gln Arg Arg Thr Lys Lys Glu Leu Ala Ser Ala Leu Lys Ser Ala Leu
100 105 110

Ser Gly His Leu Glu Thr Val Ile Leu Gly Leu Leu Lys Thr Pro Ala
115 120 125

Gln Tyr Asp Ala Ser Glu Leu Cys Ser Arg Thr Asn Gln Glu Leu Gln
130 135 140

Glu Ile Asn Arg Val Tyr Lys Glu Met Tyr Lys Thr Asp Leu Glu Lys
145 150 155 160

Asp Ile Ile Ser Asp Thr Ser Gly Asp Phe Arg Lys Leu Met Val Ala
165 170 175

Leu Ala Lys Gly Arg Arg Ala Glu Asp Gly Ser Val Ile Asp Tyr Glu
180 185 190

Leu Ile Asp Gln Asp Ala Arg Asp Leu Tyr Asp Ala Gly Val Lys Arg
195 200 205

Lys Gly Thr Asp Val Pro Lys Trp Ile Ser Ile Met Thr Glu Arg Ser
210 215 220

Val Pro His Leu Gln Lys Val Phe Asp Arg Tyr Lys Ser Tyr Ser Pro
225 230 235 240

Tyr Asp Met Leu Glu Ser Ile Arg Lys Glu Val Lys Gly Asp Leu Glu
245 250 255

Asn Ala Phe Leu Asn Leu Val Gln Cys Ile Gln Asn Lys Pro Leu Tyr
260 265 270

Phe Ala Asp Arg Leu Tyr Asp Ser Met Lys Gly Lys Gly Thr Arg Asp
275 280 285

Lys Val Leu Ile Arg Ile Met Val Ser Arg Ser Glu Val Asp Met Leu
290 295 300

Lys Ile Arg Ser Glu Phe Lys Arg Lys Tyr Gly Lys Ser Leu Tyr Tyr
305 310 315 320

Tyr Ile Gln Gln Asp Thr Lys Gly Asp Tyr Gln Lys Ala Leu Leu Tyr
325 330 335

301

Leu Cys Gly Gly Asp Asp
340

<210> 231
<211> 72
<212> PRT
<213> Homo sapien

<400> 231

Pro Arg Pro Leu Leu Ala Arg Arg Tyr Leu Cys Arg Val Thr Ser Cys
1 5 10 15

Phe Leu Ser Leu Ser Arg Ala Val Trp Trp Gln Gln Ala Gln Pro Gln
20 25 30

Ala Gln Ala Gln Pro Arg Asn Ala Glu Arg Arg Arg Arg Val Arg Gly
35 40 45

Pro Val Arg Ala Ala Glu Met Arg Pro Leu Ala Ile Ala Ser Ser Val
50 55 60

Pro Arg Thr Thr His Pro Ser Arg
65 70

<210> 232
<211> 103
<212> PRT
<213> Homo sapien

<400> 232

Leu Leu Pro Phe Ser Leu Ala Arg Gly Val Val Ala Ala Gly Ala Ala
1 5 10 15

Gly Ala Pro Ser Leu Glu Met Gln Asn Asp Ala Gly Glu Phe Val Asp
20 25 30

Leu Tyr Val Pro Arg Lys Cys Ser Ala Ser Asn Arg Ile Ile Gly Ala
35 40 45

Lys Asp His Ala Ser Ile Gln Met Asn Val Ala Glu Val Asp Lys Val
50 55 60

Thr Gly Arg Phe Asn Gly Gln Phe Lys Thr Tyr Ala Ile Cys Gly Ala
65 70 75 80

Ile Arg Arg Met Gly Glu Ser Asp Asp Ser Ile Leu Arg Leu Ala Lys

302
85 90 95

Ala Asp Gly Ile Val Ser Lys
100

<210> 233
<211> 112
<212> PRT
<213> Homo sapien

<400> 233

Leu Leu Pro Phe Ser Leu Ala Arg Gly Val Val Ala Ala Gly Ala Ala
1 5 10 15

Gly Ala Pro Ser Leu Glu Met Gln Asn Asp Ala Gly Glu Phe Val Asp
20 25 30

Leu Tyr Val Pro Arg Lys Cys Ser Ala Ser Asn Arg Ile Ile Gly Ala
35 40 45

Lys Asp His Ala Ser Ile Gln Met Asn Val Ala Glu Val Asp Lys Val
50 55 60

Thr Gly Arg Phe Asn Gly Gln Phe Lys Thr Tyr Ala Ile Cys Gly Ala
65 70 75 80

Ile Arg Arg Met Val Ser Val Ser Leu Gly Phe Ala His His Phe Gly
85 90 95

Thr Ser Trp Thr Leu Pro Cys Ala Leu Glu Cys Val Met Val Pro Glu
100 105 110

<210> 234
<211> 87
<212> PRT
<213> Homo sapien

<400> 234

Ala Arg Gly Ile Ala Arg Gly Val Val Ala Ala Gly Ala Ala Gly Ala
1 5 10 15

Gly Pro Ala Ser Lys Cys Arg Thr Thr Pro Ala Ser Ser Trp Thr Cys
20 25 30

Thr Cys Arg Gly Asn Ala Ser Ala Ser Asn Arg Ile Ile Gly Ala Lys
35 40 45

303

Asp His Ala Ser Ile Gln Met Asn Val Ala Glu Val Ser Trp Glu Pro
50 55 60

Gly Arg Arg Glu Gly Cys Asp Ile Cys Ala Gly Lys Ala Gly Cys Pro
65 70 75 80

Ile Val Glu Glu Pro Leu Gly
85

<210> 235
<211> 86
<212> PRT
<213> Homo sapien

<400> 235

Ala Arg Gly Ile Ala Arg Gly Val Val Ala Ala Gly Ala Ala Gly Ala
1 5 10 15

Pro Ser Leu Glu Met Gln Asn Asp Ala Gly Glu Phe Val Asp Leu Tyr
20 25 30

Val Pro Arg Lys Cys Ser Ala Ser Asn Arg Ile Ile Gly Ala Lys Asp
35 40 45

His Ala Ser Ile Gln Met Asn Val Ala Glu Val Ser Trp Glu Pro Gly
50 55 60

Arg Arg Glu Gly Cys Asp Ile Cys Ala Gly Lys Ala Gly Cys Pro Ile
65 70 75 80

Val Glu Glu Pro Leu Gly
85

<210> 236
<211> 77
<212> PRT
<213> Homo sapien

<400> 236

Met Arg Gly Arg Gly Arg Gly Thr Cys Arg Gly Asn Ala Ser Ala Ser
1 5 10 15

Asn Arg Ile Ile Gly Ala Lys Asp His Ala Ser Ile Gln Met Asn Val
20 25 30

Ala Glu Val Asp Lys Val Thr Gly Arg Phe Asn Gly Gln Phe Lys Thr
35 40 45

304

Tyr Ala Ile Cys Gly Ala Ile Arg Arg Met Gly Glu Ser Asp Asp Ser
50 55 60

Ile Leu Arg Leu Ala Lys Ala Asp Gly Ile Val Ser Lys
65 70 75

<210> 237
<211> 86
<212> PRT
<213> Homo sapien

<400> 237

Ile Met Pro Ser Gly Ala Ser Val Met Asp Ala Trp Ser Arg Pro Arg
1 5 10 15

Tyr Val Pro Arg Lys Cys Ser Ala Ser Asn Arg Ile Ile Gly Ala Lys
20 25 30

Asp His Ala Ser Ile Gln Met Asn Val Ala Glu Val Asp Lys Val Thr
35 40 45

Gly Arg Phe Asn Gly Gln Phe Lys Thr Tyr Ala Ile Cys Gly Ala Ile
50 55 60

Arg Arg Met Gly Glu Ser Asp Asp Ser Ile Leu Arg Leu Ala Lys Ala
65 70 75 80

Asp Gly Ile Val Ser Lys
85

<210> 238
<211> 21
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 238
tacgcagagc tcatcgcttc t

21

<210> 239
<211> 22
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 239

305

acaaccacga agagccagtc tt

22

<210> 240
<211> 28
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 240
tggctgagct cttacctggc tttcaggc

28